

HISTORY
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BERWICKSHIRE
NATURALISTS' CLUB

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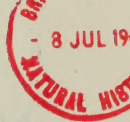
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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

THE SWINTON FAMILY.

Address delivered to the Berwickshire Naturalists' Club at Berwick, 4th November 1959, by Brigadier A. H. C. Swinton, M.C.

People often speak of "old families." In fact, no family is older than any other, and what is meant is that the particular families called "old" have managed to maintain their identity and retain records of their past longer than the majority of other folk. In the popular sense, many of the Scottish landed families are fairly "old," since their descent can be traced in a remarkable number of instances from the local hereditary administrators of the Middle Ages. Nor do their first-recorded ancestors always appear to have been "new men" in their own time. Indeed, as our present teeming population was gradually bred from out of a relatively tiny stock, the cadets of our already established leaders made good use of their combined advantages of heredity, environment and opportunity. Thus the many landed members of those still widespread and until recently dominant family groups, whose heads and numerous cadets form most of the Scottish peerage and much of the landed gentry (*e.g.*, the Douglasses, Hamiltons and Campbells) derive from surprisingly few individuals even within historic times.

Nevertheless, there are few families in Scotland whose ancestry in the direct line can be traced with any degree of confidence before the 12th century. The rare exceptions are either semi-royal, and thus known to us from their part in history, or else of foreign origin and traceable in the records of the countries whence they came. To the former category belong the Dunbars and, probably, the Homes. To the latter, a number of Anglo-Norman families, together with the Stewarts, who are Celts of Breton origin.

From the middle of the 7th century, the Angles, or English, established themselves firmly in Lothian, that is, the territory from the Cheviots to the Forth. But this Teutonic conquest does not seem to have eradicated the native population who were basically Picts. Lothian which formed part of the kingdom of Bernicia (the country between the Tyne and the Forth), soon expanded under the same English dynasty into the greater kingdom of Northumbria, which stretched as far south as the Humber. After a series of wars with Scandinavian invaders, "the chief power north of the Tyne came into the hands of a certain EADULF of Bamburgh who did not take the kingly title, but accepted the overlordship of Alfred the Great, perhaps in 886." He died in 912, leaving two sons, of whom the elder, ALFRED, 2nd Lord of Bamburgh, "as dear to King Edward (The Elder) as his father had been to King Alfred," was ruling north of the Tyne when Viking invaders defeated him at Corbridge in 918. He did homage to King Athelstan at Dacre in Cumberland in 926. His son, OSWULF, 3rd Lord and High Reeve of Bamburgh in 949, who was made Earl of Northumbria by King Edred in 953, was deprived of that part of the Earldom known as Deira, the southern part, by King Edgar in 963, and died 965, leaving issue:—

WALTHEOF, 4th Lord of Bamburgh, who after an interval of ten years when Bernicia was held by Edulf Yvecild, became Earl of Bernicia in 975 and was living in 1006 when his elder son was acting as Earl on his behalf. He had two sons, of whom the elder, UHTRED, 5th Lord of Bamburgh, was given his father's Earldom of Bernicia in 1006 by King Ethelred (The

Unready) after a successful war against the Scots under King Malcolm II. King Ethelred gave him Deira, which since his grandfather's time (Oswulf) had been held by others ; thus Uhtred was Earl of all Northumbria from 1006 to 1016, when he was killed, and succeeded by his brother, EDULF CUDEL, who was made Earl by King Canute in 1016. He was defeated by the Scots under Malcolm II and Owen, King of Strathclyde, at Carham in 1018, after which Lothian, the Scottish part of Bernicia, was united with Scotland.

He was succeeded in 1018 by ALDRED, his nephew, son of his brother Uhtred, who was Earl of English Bernicia until 1038. His granddaughter was the wife of King Duncan.

To revert to Uhtred. He had married, firstly, Ecgfrida, daughter of Aldhun, Bishop of Durham, mother of Aldred. She became a nun and Uhtred married, secondly, Sige, daughter of Styr Ulfsson. Her sons were EDULF, who succeeded his half-brother as Earl in 1038, but was killed at Court by order of King Harthacnut in 1041, and GOSPATRIC, to whom we shall return later.

Uhtred married, thirdly, Elfgufu, daughter of King Ethelred the Unready, sister of King Edmund Ironside, and half-sister of King Edward the Confessor. Their issue included Aldgyth, who married Maldred of Atterdale, second son of King Malcolm II and brother of King Duncan, and GOSPATRIC, Earl of Northumberland from 1067 to 1072, when he was deposed by King William the Norman.

Gospatric had a son, UHTRED, whose son EDULF, nicknamed RUS, murdered Walcher, Bishop of Durham, on 14th May 1080. This was probably the Edulf whose son LIULF, of Bamburgh and Swinton, Sheriff of the Northumbrians, was one of the earliest Sheriffs under the Crown on record, as well as the first individual subject in Scotland whose ownership of land can be proved by contemporary writings still in existence. Among the Coldingham writs in the possession of the Dean and Chapter of Durham is a Charter granted by King Edgar about 1098, in which Liulf is mentioned as holding Swinton before that date.

(This identification of Edulf Rus was originally suggested by J. H. Round, the celebrated authority of 50 years ago. No other Edulf is known who could have founded an Anglo-Saxon line of hereditary "*Vicecomites*" so soon after the Norman Conquest. Liulf, son of Edulf, and the early 12th century Bamburgh family, would have had a difficult time in administering turbulent Northumberland had they not belonged to the popular old Bamburgh house, which had already slain three alien administrators. Like Edulf Rus, they had interests in Scottish Bernicia, and the bulk of their lands (held in chief of the crown) lay in the heart of Bamburghshire, between the ancient Earl's stronghold and the lands restored to the Earl's Dunbar descendants).

Liulf was succeeded about 1118 by his son UDARD of Bamburgh and Swinton, Sheriff of the Northumbrians, whose name occurs in Scottish charters and in the pipe rolls of Northumberland. He was one of the witnesses at the foundation of the Abbey of Selkirk, 1119. He died about 1132, leaving four sons. WILLIAM was confirmed by King Stephen in his right to his father's land under the English Crown, and held Swinton from the monks of St. Cuthbert. ADAM and JOHN were both Sheriffs of Northumbria. ERNULF, the youngest, succeeded William in the lands of Swinton only. Described as Ernulf de Swinton, "*Miles*," he was perhaps the first instance on record of a Scottish Knight; he received from King David I about 1140 two Charters in which he is designated "*Miles meus*" and is given Swinton "*in feudo et in hereditate sibi et heredibus*" "to hold as freely and honourably as any of my barons by the same custom by which Liulf son of Edulf and Udard his son held it of St. Cuthbert and of me, paying forty shillings to the monks of Durham without any other services." These documents, which are at Durham, are the earliest Scottish records of inheritance. He died after 1166.

COSPATRIC, 5th of Swinton, was a witness to a Charter before 1177 to the nuns of North Berwick; this was also witnessed by his son HUGH, the founder of the family of Arbuthnott.

ALAN, 6th of Swinton, witnessed numerous documents and

was followed by his son ALAN, who received a Charter of the lands of Collessie and Abernethy in Fife, as Alan, son of Alan, son of Cospatric de Swinton, from Walter Olifard, the Justiciar, whose Charter was confirmed by King William the Lion in 1211. He owned also the Sheriff mill at Inveresk and held rights over Elphinstone. He died after 1247 and his tomb is in Swinton Kirk. (A cast of his skull is at Abbotsford.) He left, with another, a son JOHN, who, it has been suggested, was John de Elphinstone, first of that name, for the arms are similar.

ALAN, 8th of Swinton, appears as far north as Inverness in 1262 in an official capacity, and as far south as Croxton in Leicester.

ALAN, 9th of Swinton, granted about 1271 the Kirkcroft of Lower Swinton to the monks of Coldingham. (I have a replica of his seal).

HENRY, 10th of Swinton, swore fealty to Edward I at Berwick in 1296. JOHN 11th of Swinton, had his lands, almost valueless on account of war destruction, forfeited by Edward III after the battle of Halidon Hill in 1335. ALAN, 12th of Swinton, was witness to an inquest at Bonkyl in 1364, and his heir, HENRY DE SWINTON, styled "Lord of that Ilk," but apparently living at Abernethy during the forfeiture of Swinton and the occupation of the Merse by the English, made over all his possessions in Little Swinton to SIR JOHN DE SWINTON, 14th Lord of that Ilk, "*nobilissimus et validissimus miles*," whose Charter of Meikle Swinton was confirmed by Robert II and his son John, Steward of Scotland, in 1382, and ratified by a Bull of Pope Clement VII, dated at Avignon 9th June 1383. Sir John, a friend of John of Gaunt, and frequently mentioned by Froissart, commanded the Scots at Otterburn. He married three times; firstly, Joan, who died at the court of Edward III in 1374; secondly, Margaret Countess of Douglas and Mar, widow of William, 1st Earl of Douglas; and, thirdly, Lady Margaret Stewart, daughter of Robert, Duke of Albany, the Regent. He was killed at Homildon Hill, 1402.

SIR JOHN, 15th of that Ilk, killed the Duke of Clarence at

the battle of Beaugé in 1420. See "The Lay of the Last Minstrel"—

" And Swinton laid the lance in rest
that tamed of yore the sparkling crest
of Clarence's Plantagenet."

He was killed at the battle of Verneuil in 1424, leaving an infant son, SIR JOHN, 16th of that Ilk, who died before 1500.

SIR JOHN 17th, married a Lauder of the Bass. Their son JOHN 18TH, was Warden of the East Marches and married a Home of Wedderburn. JOHN 19TH signed, in 1567, a Bond for the protection of the infant James VI against the Earl of Bothwell on his marriage to Queen Mary. ROBERT, 20th of that Ilk, was the first representative Member of Parliament for Berwickshire, 1612-21, and Sheriff, 1620. He married a daughter of the 5th Lord Hay of Yester and by her had a son JOHN 21ST, who died unmarried in 1633, and a daughter Katherine, who married Sir Alexander Nisbet of that Ilk, a lady of great character and grandmother of Nisbet, the Herald. Robert married, secondly, a daughter of Sir Patrick Hepburn of Whitecastle and had, amongst other issue, SIR ALEXANDER, 22nd of that Ilk, Sheriff of the County and M.P., 1644-45. He married a Home of St. Bathans and had six sons. The second, ALEXANDER, became a Senator of the College of Justice as Lord Mersington, and his two elder sons were killed at the battle of Malplaquet. ROBERT and JAMES, the third and fourth, were killed at Worcester, the former when attempting to carry off Cromwell's standard. GEORGE is described as of Chesters, and DAVID of Laughton. JOHN 23RD, the eldest, Colonel for Berwickshire and M.P. in 1649 was present, as a prisoner, at Worcester, was forfeited by the Convention of Estates, and excommunicated by the Commission of the Kirk in 1651. He became, according to Bishop Burnet, "the man of all Scotland most trusted and employed by Cromwell." He was appointed in 1655 a member of the Council of State for Scotland, and a "Commissioner for the Administration of Justice to the people of Scotland," and sat as a Scottish

representative in the English Parliament. He joined the new sect of Quakers in 1657.

At the Restoration he was tried for high treason in 1661 and suffered forfeiture and imprisonment, but was released in 1667. His eldest son, ALEXANDER 24TH, died unmarried in 1687 and was succeeded by his brother SIR JOHN 25TH of that Ilk, who had lived in Holland during the forfeiture and was a considerable merchant there. He returned to Scotland at the Revolution and the Decree of Forfeiture was rescinded in 1690, the family estates being restored to him. He was M.P. for Berwickshire in the Scottish Parliament, 1690-1707, when he voted for the Union and was the first M.P. for the County in the Parliament of Great Britain, and a founder of the Bank of Scotland. His eldest daughter, Jean, married Dr. John Rutherford, and was the grandmother of Sir Walter Scott. He died in 1723 and was followed by his eldest son JOHN 26TH, an Advocate, who died in 1774, having had, amongst others, three sons, JOHN, SAMUEL and ARCHIBALD. He was one of the early improvers of land in Berwickshire, some of his double fences still existing.

It is of interest that since 1722, the date of his marriage, of 71 males born in the family, more than half have seen service in India, as soldiers or as civilians.

Of the three sons, John continued the line at Swinton, of Samuel I will speak later, and Archibald was the founder of the Kimmerghame branch.

JOHN, 27TH OF THAT ILK, was Sheriff of Perthshire in 1754, and was raised to the bench as Lord Swinton in 1782. He was one of the judges who tried Deacon Brodie, and died in 1799. His son, JOHN 28TH, was Sheriff of Berwickshire until his death in 1820. He rebuilt Swinton House in 1800, after it had been burnt to the ground in 1792. His son, JOHN 29TH, died unmarried in 1829, and the estate was bought by his cousin SAMUEL, second son of Captain Samuel Swinton, R.N., son of 26th, who owned a Bourbon newspaper in Paris called "*Le Courier de l'Europe*." He married Felicity Lefebre, whose father, an officer of the French Guards,

fell at Versailles during the French Revolution. Samuel, the son, had three sons who all died in India, and the property went to his daughter, ANNE ELIZABETH, who had married her cousin, George, 5th son of Lord Swinton, ex-Chief Secretary to the Governor General of India.

Anne Elizabeth did not like the second wife of her eldest son, and left a will which forced the sale of the estate in 1890. However, in 1913 it was re-purchased by her grandson, CAPTAIN GEORGE HERBERT SWINTON, father of the present owner, CANON ALAN SWINTON.

William, 6th son of Lord Swinton (1784-1853), was a Colonel in the H.E.I.C.S., and married Elizabeth, daughter of Sir Robert Blair, K.C.B. He had six sons, all soldiers except Robert Blair, the third, who was in the Madras Civil Service. He was the father of Major-General Sir Ernest Dunlop Swinton, one of the inventors of the tanks, and Chichele Professor of Military History at Oxford University, 1925-39.

Of the 14 male descendants of William, 13 were in the Army.

Meantime the headship of the family had passed from father to son until today it is vested in WILLIAM SWINTON, 33rd of that Ilk, who lives in Edmonton, Alberta. He has three sons and five daughters living, with numerous grandchildren, and visited us in 1958.

To return to ARCHIBALD, 1ST OF KIMMERGHAME, 4th son of John, 26th of that Ilk. He went to India as a Surgeon's Mate about 1752, having got a M.D. at St. Andrews. Exchanging to be a fighting soldier in 1759, he became a Captain in 1763, A.D.C. to General Carnac, and Persian Interpreter to Lord Clive. He was a witness to the Grant of the Dewanee by Shah Alum, the Great Moghul. Returning home in 1766, he received the Freedoms of Glasgow, Inverness and the Burgh of Fortrose. In 1769 he bought Manderston, which he sold in 1783, and Kimmerghame in 1771. He married Henrietta Campbell of Blytheswood, and had three sons and four daughters. He sold Kimmerghame in 1803 and died in Bath the following year.

His eldest son, JOHN CAMPBELL SWINTON, 2nd of Kimmerg-

hame, after seven years in the Army, retired and bought Broadmeadows, Hutton, where he built the mansion house. In 1850 his aunt, Mary Campbell, who had bought Kimmerghame in 1847, died and left it to him. He at once joined the builders of the age, pulling down the old house and building a new one. He died in 1867, aged 90.

Of his children, JAMES RANNIE SWINTON was a popular society artist of the middle of the last century. Mary lived at Blythebank, Duns, where she died in 1891, and Henrietta was the mother of Lord Davidson, Archbishop of Canterbury.

The elder son, ARCHIBALD CAMPBELL SWINTON, 3rd of Kimmerghame, born 1812, was an Advocate and Professor of Civil Law in the University of Edinburgh. He married twice, his second wife being Georgiana Sitwell, great-aunt of the modern Sitwell family. LIULF SWINTON, the eldest son, succeeded to Kimmerghame on the death of his father in 1890, and died in 1920. His daughter passed it on to me in 1937.

GEORGE, Captain, H.L.I., Member of the L.C.C. for 28 years, and Chairman in 1912, Lord Lyon King of Arms 1926-29, died in 1937.

ALAN ARCHIBALD, F.R.S., was a pioneer of "X" rays, wireless and television (1863-1930).

I, ALAN HENRY CAMPBELL SWINTON, Brigadier, late Scots Guards, am the only son of George Sitwell Campbell Swinton. My son, JOHN SWINTON, is a Major in the Scots Guards, and has two sons, JAMES and ALEXANDER.

Thus the family should continue in Canada, and at Kimmerghame, for some generations to come, though these are the only branches that will survive.

NOTE.—This address appeared originally, in substance, in *The Scottish Genealogist*, 9th April 1959, and is reprinted with the consent of the author.

Reports of Meetings for the Year 1959.

1. The first meeting of the year was held on Wednesday, 20th May, at the Rink Camp and Sunderland Hall, Galashiels. About 110 members were received by the Vice-President, Mrs Swinton of Swinton, who introduced the speaker, Miss M. Dickson, of Galashiels. On arrival at the two Iron Age Forts and a section of the Catrail, Miss Dickson pointed out the foundations and the inner stone wall. This stone walling is unique, and at one section there is a built-in chamber. Little has been written of the Rink Camp, but it is in an unusually good state of preservation.

Although the day was cold, it was clear and bright. On leaving the Rink members proceeded to Sunderland Hall, where a picnic lunch was taken in the garden.

Mrs Scott-Plummer welcomed the Club, and gave a brief outline of the history of the family and of the house itself. Built by the celebrated Edinburgh architect, David Bruce, it is an excellent example of his style of planning. Members were able to examine many types of book in the library (a room familiar to Sir Walter Scott) which are of national importance: incunabula, heraldry, and local history. The gardens were enchanting, and the yew hedges and specimen trees attracted much notice. Brigadier Swinton, the new President, thanked Mrs Scott-Plummer on behalf of the Club. Afterwards tea was taken at the Douglas Hotel, Galashiels.

An additional meeting was held on 25th May, at Grindon Corner, where Miss Pape had invited members to see her rock garden and collection of Chinese porcelain and pottery. This collection, one of the finest of its kind in the north, contains specimens and rare pieces from the Tang, Soong, Ming and Ch'ing Dynasties. *Objets de vertu* in jade and cornelian were greatly admired.

The rock garden, which is well known, contains many choice Alpine and rarer native plants. Great appreciation was shown and gratitude expressed to Miss Pape, who had risen from a sick-bed in order to receive the Club.

2. The second meeting was held on Thursday 18th June, at Rothbury. After assembling at the railway station, cars proceeded to Garleigh Moor. Visibility was perfect, and much of Northumberland could be seen from the superb vantage point. Captain R. H. Walton, F.S.A.Scot., spoke of the two camps and of the various inscribed stones. The company then walked to Lordenshaws Camp, one of the largest in the district, and also saw the stones. They bear a similarity in design to stones found elsewhere in the County.

A picnic lunch was taken on the moors in brilliant sunshine. At 2 p.m. members met outside the main entrance to Cragside, and were hospitably received by The Right Hon. The Lord Armstrong and Lady Armstrong. Built in the latter part of the 19th century, and furnished in the manner of that period, it is unique both inside and out, commanding an impressive vista, backed by rhododendron-covered hills, through which wind seven miles of private driveway. Lord Armstrong spoke of the building of the house, the first in the world to be lit by electricity, from which the Canadians took the idea of utilizing the water-power of the Niagara Falls. Many Imperial personages have stayed at Cragside, including Their Royal Highnesses The Prince and Princess of Wales, His Imperial Highness The Crown Prince of Japan, and H.R.H. The Padishah of Persia. Lord and Lady Armstrong conducted parties over the house. The visit was much enjoyed by some 140 members, many of whom stayed to have tea at the Coquet Vale Hotel, Rothbury, after availing themselves of the opportunity of driving through the world-renowned woodland.

Later in the month a second additional meeting was held, members assembling at Alwinton and driving up the Coquet valley to Linbrig to the site of the mediaeval village of Lynnbrig. Captain R. H. Walton, F.S.A.Scot., who has done much excavation work here, pointed out the site of the various buildings and gave detailed plans of the original village. Specimens of ferns, plants and lepidoptera were collected. Mrs Walton had previously invited those present to tea at Wilkinson Park ; a gracious and thoughtful gesture. The house, built in the 1920's, has panoramic views, and members were able to inspect at their leisure the well-known Walton collection of fire-arms, and the many museum pieces

which it contains. It was at a late hour that the last member was able to drag himself away.

3. The third meeting of the year was held on Wednesday 22nd July, at Penielheugh, and Marlefield. Once again the Club was blessed with fine weather, although the visibility was not too good. Assembling at the base of this famous landmark and monument, erected to commemorate Wellington's victory at Waterloo, members listened with interest to the Rev. J. I. Crauford Finnie. Mr Finnie pointed out the site of the Roman approaches, and of the early British camps, and told of the battle of Lilliard's Edge, and of the building of this (second) column. Mr John Inglis, West Nisbet, a member of the Club, pointed out the various places of interest visible from Penielheugh. Several members climbed the tower, which can be seen from all over the Merse and Teviotdale. After lunch, a short drive brought the Club to Marlefield, the home of Mrs. Goodson, another member. The house, built in the 17th century by the Bennet family, is reputed to have been from the design of Sir Christopher Wren, and has something of the appearance of a château on the Loire, with its mansard roof and gabbling. In a delightful and witty talk Mrs Goodson explained the house, its owners and its history, and took parties over it. Members were much interested and highly appreciative of the unlimited trouble Mrs Goodson had gone to to make the day memorable. The gardens were another source of pleasure and the specimens of *Quercus Fastigata* frequently commented upon. Tea was taken at the Ednam House Hotel, Kelso.

Mrs Swinton of Swinton held a botanical meeting this month at Goswick Sands, and members were able once again to avail themselves of her great knowledge of the botany of the seashore. But more members ought to attend these meetings.

4. For the fourth meeting of the year, on Thursday 20th August, members gathered in brilliant sunshine at Foul Ford. Brigadier Swinton related the strange and true story of the supernatural happenings that took place there. Although the

family of Neil are supposed to have come from Dundee, some of them were already in this district when the tragedy took place. It is odd to discover that in the 16th century a family of Neils at Tweedmouth were dabbling in witchcraft, in an attempt upon the life of one of the Homes of Manderston. It may well be that their subsequent fate at Foul Ford was a repercussion from these earlier days.

At Evelaw Tower, where a picnic lunch was taken, the Secretary related its history and that of the St. Clair family. A short drive brought the Club to the site of the romantic home of Lady John Scott, the distinguished Border poetess. Here members were welcomed by Mr and Mrs J. Logan McDougal. In a vivid and humorous address, continued by his wife, Mr McDougal recreated the story of Spottiswoode, and revived local memories of Lady John. Later he escorted members over the site of the house and round the policies, on which still broods the nostalgic aura of the past. Tea was taken at Westruther.

5. The fifth meeting, on Thursday, 17th September, provided yet another day of brilliant weather. A large number of members gathered at Belchester, where they were received by Colonel and Mrs Wilson. One of the ancient towers of the Borders, now incorporated in a later building, the house has a long family history, and is still in the possession of descendants of the Dickson family. The Secretary spoke, explaining the proximity of the Roman Camp, and pointed out earthworks of an earlier date. He also referred to the connection of Belchester with Castle Law and the Mote Hill, and to the long family tradition. Colonel and Mrs Wilson kindly allowed members to see much of the house, with its Jacobean pannelling and staircase, and special interest was shown in the stream that runs through the cellars beneath it. Captain Walton then spoke at the site of the Roman camp which lies behind the house, and compared it with similar camps elsewhere.

Members then drove to Kimmerghame, the home of the President, Brigadier Alan H. C. Swinton, M.C., F.S.A.Scot., who, with Mrs Swinton and their family, gave the Club a most warm welcome. After ringing the great bell (for the first

time since the disastrous fire of 1938) the Brigadier, in his inimitable way, traced the story of the Swintons and of Kimmerghame. The restored house contains superb and varied collections of old books and works of art, and members were allowed ample opportunity of seeing both these and the many other treasures that the house contains. This was, indeed, an unforgettable visit. Later, tea was taken at the Black Swan Hotel, Duns.

6. At the Annual Business Meeting on 4th November, at the Tweed Vale Hotel, Berwick-on-Tweed, the Secretary, Treasurer and Editing Secretary presented their reports, which were approved. Brigadier Swinton then delivered his Presidential Address on "The Swinton Family," and later handed over his insignia of office to his successor, Mrs Swinton of Swinton, at the same time naming as the new Vice-President, Captain R. H. Walton, F.S.A.Scot., of Wilkinson Park. The office-bearers were re-elected *en bloc* and tea was thereafter taken in the hotel.

Secretary's Report—1959.

I should like to take this opportunity of expressing my sincere thanks to the Council and members of the Club, for their continued help and co-operation. Without them there, would, indeed, be unsatisfactory meetings. The past season has been most successful, with large numbers present at each outing. I would again stress the importance of the extra meetings. Some people have said that the Club 'is not what it used to be,' with little or no attention being paid to the Natural Sciences. One has only to read the *History* to ascertain that a great deal of work continues to be carried on in that direction. In fact, the lack of support given to extra meetings for field work is something to deplore. Considerable efforts are constantly made to cover all branches of the Club's activities, but the carrying of any form of Botanical or other equipment is rarely seen. The visiting of houses is something asked for by members themselves, and much trouble is taken to enable them to become conversant with the various types of architecture. It is for this purpose, and for historical

reasons, that we make these visits, which members undoubtedly appreciate. As a Club I hope we are duly grateful to the owners of such houses and properties, who so willingly, and often at great personal inconvenience, show us round themselves, or allow us to wander about at our leisure.

Treasurer's Report—1959.

I regret to report a loss on the season's working of £44 8s. 11d., following on last year's loss of £53 7s. 7d.

Income from subscriptions, etc., for the year amounts to £446 14s. 0d., and expenditure to £491 2s. 11d., showing a loss on the year of £44 8s. 11d.

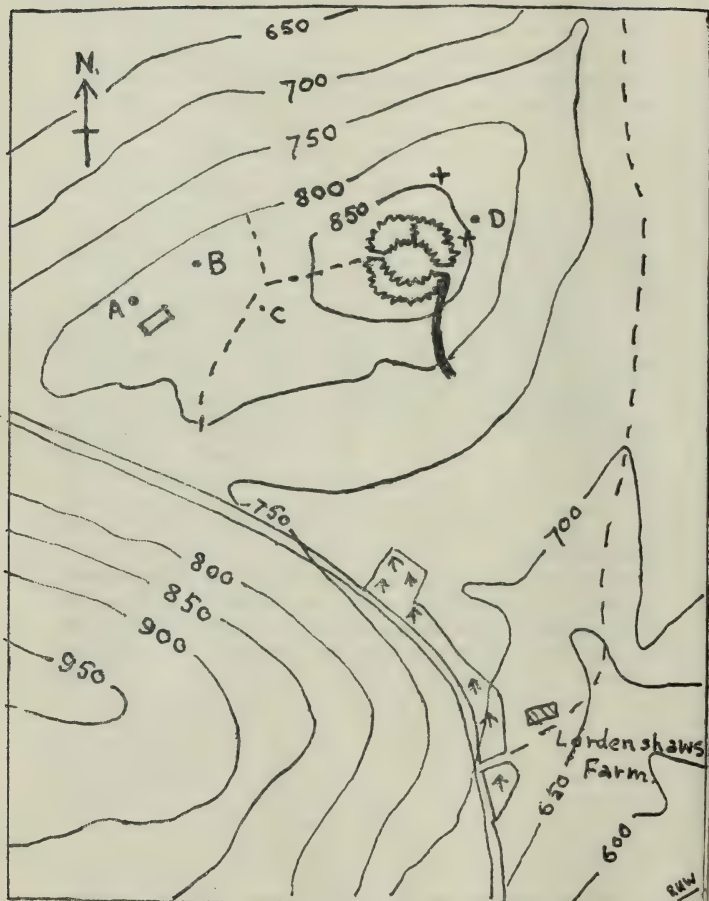
The Credit balance on General Account at the commencement of the season was £83 9s. 1d., less loss on the year, £44 8s. 11d., giving a Credit Balance on General Account as at 20th September 1959, of £39 0s. 2d.

The Reserve, or Investment Account with the Trustee Savings Bank now amounts, with interest, £4 11s. 6d., to £187 15s. 5d. So that, as at 20th September 1959, the Club's total credit on both accounts amounted to £226 15s. 6d.

Donations, etc., to the Flodden Field Memorial Fund amounted to £47 15s. 0d., out of which there have been no disbursements.

The Club's books and accounts have, once again, been audited by Mr. P. G. Geggie, C.A., our Honorary Auditor, and I should like to take the opportunity of thanking him for his renewed kindness in performing this valuable service for the Club.

LORDENSHAW'S CAMP.



- Track.
- x Grave.
- House Site.
- Hollow Way.

NOTE ON LORDENSHAW'S CAMP, ROTHBURY.

By CAPTAIN R. H. WALTON.

Lordenshaws, perched on an exposed ridge of Garleigh Moor, south of Rothbury, is probably the best known and most visited camp in Northumberland. It is notable for three things. Firstly, it is in comparatively good condition and of unusual design. Secondly, there are, close at hand, several rocks inscribed with the cup and ring marks so common in Northumberland. Thirdly, the view from the camp is unequalled.

Bitterly cold as it can be in winter, in summer this is an ideal spot from which to survey the valley of the Coquet from Rothbury to Hepple and beyond. To the east, the sea glitters in the sunshine and to the north can be seen the superb forest of Cragside. To the west, tower the sandstone hills of Simonside, poised as if to break like a tidal wave on the green fields below.

Lordenshaws is not a hill-fort in the usual sense, but it represents a fair specimen of a summer herding camp intended for temporary defence only and as shelter for stock at night. The camp, of that irregular form so typical of the native British, consists of two roughly concentric circles of defence, an interesting feature being a pair of narrow passageways leading into the central enclosure from west and east, the latter joining a hollow way. The remains of two graves may be found to the north-east of the camp. Hut circles and dividing walls can be traced in the centre and southernmost enclosures, and there are two square recesses in the south wall.

The term " wall " is used to describe the earthen banks, now sunk through time and weather, and which, originally, carried a timber palisade. At present, Lordenshaws is far from any forest of consequence, but, when built, it was within a few hundred yards of Rothbury Forest. After the war, the moor just south of Lordenshaws farm was deep-ploughed, and vast

quantities of tree roots were unearthed. The camp itself stands on bedrock where no tree could grow to maturity.

A specific date cannot be assigned to this structure, but it may be said to lie in the general period from the first to the fourth century. As the camp shows no signs of rebuilding or extension, it seems likely that it was not occupied for a very long period. For the same reason, it is likely to have been built and occupied towards the end of the period and not long before the Saxon invasions of the late fourth century.

The Rothbury area was in the territory of either the Votadini or the Maeatae, whose forts and camps cover the northern slopes of the Cheviot Hills at a respectful distance from Dere Street. Hostile to Roman rule, they were ever ready to overrun the defences of the Wall when an opportunity presented itself.

It must not be forgotten that Roman civil government never extended into north Northumberland. There is some reason to suppose that plans were made to do this following the visit of the Emperor Hadrian to Britain in 121 A.D. Maps and surveys were made and the Wall was built in a remarkably short time. The backbone of the system was already in existence on the line of Dere Street, but one other major work was undertaken. This was the construction of the great road now known as the Devil's Causeway from Corbridge towards Tweedmouth, and its feeder road from Rochester to Bridge of Aln. These roads would have supported a supply camp at Tweedmouth on the lines of that at South Shields, but there is evidence that they were never used or even finished. However, work was halted for some reason, possibly the burden on the military forces available of the Scottish campaign of Q. Lollius Urbicus in 140 A.D.

Under these conditions, the tribal system in the Coquet Valley must have remained virtually intact, unlike that of the Brigantes of Yorkshire, who were pacified finally in 155 A.D. The northern tribes, being cattle men, would summer their herds on the hills and return to the valleys in winter, one camp site almost certainly being where Rothbury stands to-day. Later, when the Saxons drove them out and established their own agricultural system, all traces of British occupation would be obliterated. In Rothbury, close to the

railway station, there is a very deep sunk way, such as might be formed by the passage of driven animals, leading from the direction of Garleigh Moor to the main ford over the Coquet. From there, the main street leads upwards towards Old Rothbury Camp, where there are traces of a strong defensive position.

The cup and ring marked rocks associated with Lordenshaws are interesting on account of their variety. They are not easy to find on the ground and the accompanying sketch map may be of service in this respect. The different groups are marked A, B, C, and D, for reference, and may be described as follows :

- A. A free-standing stone with a deep, straight-sided cavity in the top, possibly for holding salt for stock. Not necessarily of great age, but interesting.
- B. Bedrock at ground level inscribed with a horseshoe shaped groove enclosing a number of small cups.
- C. A shelf of rock, partly quarried away, bearing concentric circles, now very faint.
- D. A series of large, steeply sloping sheets of bedrock, covered with cups with long grooves in the direction of natural drainage. These are now much worn by the feet of sightseers.

It can be said, fairly enough, that nothing is known of the origin or purpose of cup and ring markings, which are found all over the British Isles and especially in north Northumberland.

Examination has shown that the rings are not formed by a rotary motion of a tool, but are pecked out with a sharp instrument. The rings are almost always found on the softer rocks, and this points to the possibility of the use of flint or stone tools.

There is an infinite variety of design, and opinion is united in assigning a date prior to the Saxon invasions at the latest. Against this, it is hard to understand how these carvings have lasted so long, considering the rapid rate of wear which has been observed since they were first noticed and commented upon by F. C. Langlands in 1825.

In 1864, Mr. George Tate, of this Club, contributed a comprehensive paper on the Sculptured Rocks of Northumberland

as far as they were known at that time. The plates are especially valuable in that they show the rocks as they then were, before further erosion took place.

Cup and ring markings are still a mystery, and represent an ever-present challenge to the antiquary with an enquiring mind and time to spare.

NOTES ON SOME RECENT DEVELOPMENTS ALONG THE ROMAN WALL.

By RUTH DONALDSON-HUDSON, B.A., F.R.Hist.S.

I. EXCAVATIONS NEAR WALLTOWN

From just east of Carvoran (*Magna*), the Roman fort half a mile north-east of Greenhead village, Hadrian's Wall follows the crest of a ridge that extends eastwards for about two miles to beyond Great Chesters (*Aesica*). This ridge, which at Walltown Crags reaches 860 feet above sea level, is in fact the first great upthrust of the Northumberland Whinsill, that outcrop of dolerite which surges up at intervals on a S.W.—N.E. course from the Tybalt valley at Greenhead to Cullernose Point on the North Sea coast.

The western end of the ridge has been called "The Nine Nicks of Thirwall" on account of its notched outline, but the nicks are now reduced in number owing to extensive quarrying, which has, alas, obliterated some parts of the Roman Wall. Fortunately the Ministry of Works has now intervened to save the Wall from further inroads, and since 1959 its workmen have uncovered a spectacular stretch of wall, close to Walltown Farm. The remains here are not so high as those exposed between Birdoswald and Harrowscar Milecastle, but the interest of this newly-uncovered portion lies in its demonstration of the building methods used by the Romans in negotiating very steep gradients, such as they often met along the Whinsill escarpment.

The new work has been carried out on either side of a "Nick," to the east of which the ground rises very steeply, though less so to the west. To add to their difficulties, the Romans had to cut their way through massive blocks of dolerite before they could lay the foundations of the Wall.

On the north face, where the ground falls away precipitously, the footings are stepped up, literally (Photograph A). On

the other face, however, where there is a gentler slope to the south, the lowest course conforms to the east-west gradient, while the courses immediately above the foundation plinth are tapered off so as to bring the higher courses parallel with the horizon. The effect is of a series of wedges, each wedge being some three or four courses thick (Photograph B).

At the top of the rise is Turret 45a. On one of my visits to the site I fell in with a former student of King's College, Newcastle, who was in process of making a detailed drawing of the turret for the Ministry, before the pointing of the stonework and replacing of soil were done. She pointed out that the turret was built earlier than the Wall, which on either side butts up to, but is not bonded with, the turret. It must have been an important link in the long-distance system along the frontier: given reasonably good visibility (which certainly did not obtain on that cold, misty November day!), no fewer than thirteen camps—connected either with the Wall, or with the Stanegate, or with the Maiden Way up the South Tyne valley—would be visible from this turret. It would also be in signalling contact on the one hand with the Cumberland stations at Pike Hill (6 miles to the west on the Wall) and on Gillalees Hill (about the same distance to the north-west, between Birdoswald and Bewcastle); on the other hand with the tower on Barcombe Hill, 7 miles to the east, just above the Stanegate fort at Chesterholm (*Vindolanda*). But quite the most arresting thing was that the floor of the turret had been cleared down to its foundations, and there, rising at a steep angle from south to north, lay the actual rock of the Whinsill. (The turret floor has been filled in again with soil since then).

Beyond the turret, eastwards, the Wall has gone completely for about half a mile—quarried away! To the west of the nick, however, excavations are continuing, and some 200 to 300 yards remain to be uncovered before the stone quarry again intervenes. (Photographs C and D).

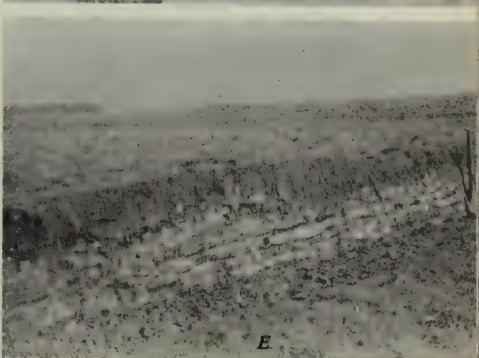
II. ROMAN CEMETERY AT BIRDOSWALD

In the spring of 1959, new extra-deep ploughing of a field on the edge of the River Irthing escarpment, about a quarter



A. North Face of Wall.
Note stepped-up foundations.

B. Work in progress to westward of "Nick."



C. South Face of Wall.
Showing "Wedging" of courses.

D. Turret 45a. View eastward.

E. Vertical Section of Turf Wall.
North mound of Vallum in background.

of a mile west of Birdoswald fort, revealed the site of a Roman burial ground. The burials were all cremations, and about five funerary urns containing ashes and burnt bones were turned up. Near-by were the remains of the funeral pyre, with charred wood and iron fittings from the funeral couch.

When I visited the site, the pottery urns and other remains had already been removed to the museum in Carlisle, but I could trace the area of the cemetery as a rough rectangle, by the grey ash in the red soil.

III. THE TURF WALL

Going westward from Birdoswald, at about 10 miles distance, a signpost shows a farm road leading down to Lanerton. About 300 yards down from the gate this lane crosses the Turf Wall and the Vallum, and just above the roadway, on the left, a section was cut through the Turf Wall, for the Cumberland and Westmorland Archaeological Society's decennial pilgrimage to the Wall, in 1959.

Our Club members who visited Birdoswald in 1958 will remember Miss Hodgson's vivid description of the Turf Wall, when it was found under the east-west axis of the fort, and of how in vertical section it shows horizontal bands: dark streaks (from the decomposition of vegetable matter) alternating with paler layers (representing the underlying soil of the original sods). In the section cut above the Lanerton lane these striations are plain to see, and it is well worth a visit to the site (Photograph E).

IV. TURRETS 51 a. and b.

Some $2\frac{1}{2}$ miles west of Birdoswald, Turret 51b. was excavated in 1958. It stands on the north verge of the road (close to Lea Hill farm), and a little of the Wall remains on its west side. Within the turret successive floor levels have been revealed.

Turret 51a., further east, has yet to be uncovered. Its south wall is just visible on the roadside, under a mound of turf and briars.

Investigation of these turrets, as early as 1927, had shown that they were similar in design to the stone-built towers

along the Turf Wall. Some traces of the demolished Turf Wall were also revealed. These facts, coupled with similar findings at the extreme west end of the Wall, proved that a turf rampart had originally been built all the way from the Irthing river-crossing to Bowness-on-Solway, to be later replaced by a stone wall. The change-over was completed before 163 A.D. (See *Handbook to the Roman Wall*, 11th Edition).

OBITUARY NOTICES.**Mrs M. G. JONES.**

The sudden death of Mrs Jones in a motor accident last November, has deprived the Club of an industrious and quietly enthusiastic member. Her chief interest lay in epigraphy, and, through it, in the tracing and linking up of family genealogies, particularly in the Lauder area, where she had come to live after the death of her husband, a retired Army officer. We first met her on a dank and dismal afternoon of early autumn, carefully removing the moss and lichen from a recumbent tombstone in Eckford Churchyard, on the chance of some relevant inscription, or part of an inscription, emerging.

Both her sons joined the Club in 1955. The younger, who is still a Junior Member, was injured in the same accident in which his mother lost her life, and for some weeks was detained in the Edinburgh Royal Infirmary. Much sympathy will be felt for them in their tragic bereavement.

H. H. COWAN.

It does not seem six years since I wrote an appreciation of our late Secretary on his retirement, and expressed "our hope that a steady, if gradual, return to health will spare him to us as an Elder Statesman for many years to come."

Unfortunately such a hope has not been fully realised. As time went on, Mr Cowan disappeared into a physical, and spiritual, "shell," and more and more viewed life, and his friends, from a distance, to their great, but unavailing, regret. It is sad, too, that he died away from that charming small property, with its varied miniature landscapes, and the garden and happy bird life, in the depiction of which his artistic side found expression. A few of us were glad to renew acquaintance with it all after the funeral, and to recall our old friend and faithful office-bearer when loneliness had not yet enveloped him, and his fundamental kindness of heart every now and then, almost unwillingly, betrayed itself.

THE FOSSIL PLANTS OF BERWICKSHIRE : A REVIEW OF PAST WORK.

PART II. WORK DONE MAINLY IN THE PRESENT CENTURY.

By A. G. LONG, M.Sc., F.R.E.S.

In Part I of this paper it was seen that the principal discoveries of fossil plants in Berwickshire during the nineteenth century largely resulted from the work of Henry Witham. Similarly, the discoveries of the present century stem largely from the work of one man—Robert Kidston, LL.D., D.Sc., F.R.S. (1852-1924). Both Witham and Kidston prosecuted their work as amateurs, and both left their mark on palaeobotanical science to a degree far in excess of the purely local interest of their work considered here.

An account of the life and work of Dr. Kidston was written by Dr. R. Crookall and published in 1938 by the Geological Survey (Crookall, 1938). The details quoted below are based on this account. I am also indebted to Dr. Crookall for permission to reproduce the photograph of Dr. Kidston which was loaned to me by Professor John Walton of Glasgow University. This photograph, showing Dr. Kidston at work in Bristol University, was taken by Dr. Crookall only a few weeks before Dr. Kidston's death.

Robert Kidston was born in 1852 at Bishopston House, Renfrewshire, but while he was still at an early age his parents removed to Stirling, which henceforth became his home town. For a time he was employed by the Glasgow Savings Bank, but after 1878 he pursued his botanical researches full time, being enabled to do so by private means. His interest in fossil plants was probably aroused by attending lectures given by Professor W. C. Williamson in Glasgow, and he published his first scientific paper in 1880 at the age of 28. About



Dr. ROBERT KIDSTON, F.R.S. (1852-1924).

This was the last photograph of Dr. Kidston and was taken by Dr. R. Crookall in the Palaeobotanical Room of Bristol University.

that time he began to fulfil the task of honorary palaeobotanist to the Geological Survey. He also acted as joint secretary of the Stirling Natural History and Archaeological Society from its foundation in 1878.

In a letter written to me from Egypt by the late Professor F. W. Oliver of Cairo University and dated 24.2.1945, he says : " Where you are now living must be classic ground in palaeobotany, Black and Whiteadder ; Lennel, etc., favourite hunting-grounds of Kidston's. In 1881, when I hardly knew there was such a realm as fossil botany, I remember spending a night at Norham, and next day walking to Coldstream, Kelso and Melrose. Kidston once told me he had picked up quite useful specimens from the broken-up road material and from walls in that district. Though I have visited the Northumbrian and Scottish coast-line as far as the Firth of Forth, I know best W. Central Northumberland—Woodburn, just S. of Otterburn, where my forebears farmed up to about 1760."

Dr. Kidston's first contact with Berwickshire fossil plants appears to have been made through Mr James Bennie, with whom he published a joint paper on Scottish Carboniferous spores (Bennie and Kidston, 1886). This must rank as one of the earliest papers on a subject which has become of increasing importance and which has now a large and complex literature of its own. In this paper the first locality referred to on p. 93 is the shore " half a mile east of Cove Harbour and one and a half miles N.E. of Cockburnspath." The spores described were found in the basement beds of the Calcareous Sandstones " in sandy fakes beneath a hard sandstone in which *Stigmariæ*, *Lepidodendra*, and *Calamite*—like plants in fragments are abundant."

" In the spore bed scorpion remains are frequent, and in the plant bed the original of the Eurypterid *Glyptoscorpius* (*Cycadites*) *Caledonicus* was found " (cf. Salter's list appended to Geikie's "*Geology of Eastern Berwickshire*"). Bennie and Kidston went on to say : " It is noteworthy that in the Upper Old Red Sandstone, which occurs only a few feet below, few if any plants are preserved, yet here all at once spores are found in the sandy fakes in myriads, proving the existence of

an abundant vegetation little younger in age than that of the underlying O.R.S."

The spores discovered were named *Lagenicula I* and described as being "in a fine state of preservation."

The plant bed referred to above by Bennie and Kidston is still exposed in the little bay at Horse Roads, north of Pease Bay, and is very near the base of the Carboniferous System. In this plant bed I have found an assemblage of fragmentary fossil plants similar to those later discovered by Mr. A. Macconochie and Dr. Kidston on the Langton Burn, near Gavinton. Among these plants there occurs *Stenomyelon tuedianum* Kidston—the stem of a primitive Pteridosperm which so far has only been found in Berwickshire. Its original discovery goes back almost to the middle of last century, when the first specimen was found at Norham Bridge by Adam Matheson, a millwright and amateur geologist of Jedburgh. Not much is known of Matheson, though he is referred to by Alexander Jeffrey in *The History and Antiquities of Roxburghshire*, Vol. IV (Preface) where he is mentioned as having afforded "much information in regard to points of local interest in the geology of the district" (Jeffrey, 1864). He was also known personally to David Milne, who mentioned him in two footnotes in his "Geological Account of Roxburghshire" (Milne 1843, pp. 441 and 477). Milne comments on Matheson's "geological zeal" and describes how he attempted to trace the course of the Hawick volcanic dyke south of the Border:—"Having intimated to me his intention of setting out on this voyage of discovery, and asked me for instructions, I sent him out a map, compass and other necessary implements. He writes me, that he hired a horse at Jedburgh, and set out from Hindhope along the line which, at that place, the dyke appeared to run in." Matheson apparently succeeded in tracing the dyke to within seven or eight miles of the sea.

Adam Matheson's discovery of *Stenomyelon* must have occurred sometime before 1859, as in that year some sections were presented to the museum at the Royal Botanic Gardens, Edinburgh. The first specimen to come into the hands of Dr. Kidston was labelled "near Berwick" and was a gift of Dr. B. N. Peach, F.R.S., who had obtained it from his father, Mr C. W. Peach, A.L.S. This specimen was later ascertained

to have come from Adam Matheson, who, Dr. Kidston believed, was also the author of an anonymous pamphlet describing some fossil stems found at Norham Bridge.

In describing this fossil Dr. Kidston wrote: "The matrix containing Mr Matheson's fossil was an impure fine clay, apparently with a fair proportion of iron, and one showing features which were possible of recognition in the field; but though a careful search for a similar bed was made in the neighbourhood of Norham Bridge, no trace of such could be found *in situ*. Subsequently, in 1901, we discovered some small blocks of the desired rock lying on the side of the road near the north end of the Norham Bridge. It was ascertained that the material came from a cutting made in the road while putting in a drain some time before; the surface of the road in the neighbourhood of the drain was therefore carefully examined, and in a small block which had been used for refilling the cutting the specimen was discovered which has enabled us to give a detailed description of the species." (Kidston and Gwynne-Vaughan, 1912, p. 263; also Scott, 1923, Vol. II, p. 135; and Scott, 1924, p. 162).

Dr. Kidston was aided in his search for Adam Matheson's fossil stem by Mr. A. Macconochie of the Geological Survey. Arthur Macconochie (1850-1922) was born at Dailly in Ayrshire and worked as an assistant with the Geological Survey from 1869 to 1913. He was a fossil collector of great skill, with acute powers of observation in the field, and made several important discoveries, which are mentioned in an obituary notice written by John Horne (1924, pp. 395-397).

In 1900 Mr Macconochie discovered fossil plants at several localities in Berwickshire, viz. at Lennel Braes, near Coldstream; at "Willie's Hole," near Allanton; at the scaur near Edrom House; and on the Langton Burn 400 yards N.—NE. of Gavinton. In the next year Dr. Kidston accompanied him to these localities, and in addition they obtained specimens from the Ladykirk Burn, from the Blackadder above Allanton Bridge, and from the Bell's Burn scaur on the Whitadder below Blannerne Bridge (Kidston, 1901, 1902).

In his report to the Geological Survey for 1900 (Kidston, 1901, p. 174), the following species were recorded from Berwickshire:

- (i) From "the well known section of the Tweed at Lennel Braes" ;

Alcicoropteris convoluta Kidston.

Sphenopteris (*Diplotmena*) *patentissima* Ett.

Lepidodendron sp.

Stigmaria ficoides Sternb.

Stigmaria ficoides var. *undulata* Goepp.

- (ii) From the right bank of the Whitadder, a $\frac{1}{4}$ mile west of Edrom House ;

Marchantites n. sp.

Alcicoropteris convoluta Kidston.

Sphenopteris sp.

Aphlebia sp.

Lepidodendron sp.

- (iii) From the right bank of the Whitadder, $\frac{3}{4}$ mile below Allanton :

Marchantites n. sp.

Aneimites sp. (later identified as *A. acadica* Dawson).

Sphenopteris elegans Brongt.

Alcicoropteris convoluta Kidston.

Aphlebia sp.

Lepidodendron spitsbergense Nathorst.

Lepidostrobus sp. (probably *L. allantonense* Chaloner).

Stigmaria ficoides Sternb.

Cardiocarpus bicaudatus Kidston (later re-named *Samaropsis bicaudata*).

Dr. Kidston concluded this report by saying that other specimens still awaited examination, including some showing structure from Lennel Braes, Norham Bridge, and Langton Burn.

The *Lepidodendron* which he identified as *L. spitsbergense* Nathorst, was shown to be clearly distinct from *L. veltheimianum* Sternb. Of the specimen *Aneimites* he said ; " Though small, it is the first evidence of this genus in British rocks."

The fossil which he named *Marchantites* he regarded as " perhaps the most interesting fossil among the plant impressions collected . . . a genus which I believe has not been previously found in Carboniferous rocks."

In the report for 1901 (Kidston 1902) we read on p. 178 that : " In the Autumn (of 1901) Mr Kidston once more placed his valued services at the disposal of the Geological Survey, and, accompanied by Mr Macconochie, made a search for rare fossil plants among the lowest Carboniferous rocks of the Border."

Specimens were recorded from the following localities :

- (i) From the Whitadder, right bank, scaur under Edrom Church, $\frac{1}{4}$ mile west of Edrom House ;
Sphenopteris elegans Brongt.
Lepidodendron Veltheimianum Sternb.
Stigmaria ficoides Sternb.
Cardiocarpus bicaudatus Kidston.
- (ii) From Whitadder, right bank, at " Willie's Hole," one mile east of Allanton (locality (iii) of the first report) ;
Marchantites sp.,—distinct from that already noted.
Lepidodendron Veltheimianum Sternb.
Stigmaria ficoides Sternb. var. *undulata* Göpp.
- (iii) From road cutting at North end of Norham Bridge ;
A *Noeggerathia*-like pinnule was found in the upper portion of a cementstone band about twelve inches thick in shale a few feet above the level of the road.
" Some material showing plant structure was also collected." (This was probably *Stenomyelon*).
- (iv) From small stream, $\frac{1}{4}$ mile N.E. of Ladykirk ;
Asterocalamites scrobiculatus Sch.
- (v) From right bank of Blackadder, $\frac{1}{4}$ mile above Allanton Bridge ;
Lepidodendron spitsbergense Nath.
- (vi) From Whitadder, Bellsburn Scaur, near Chirnside ;
Aneimites sp.
- (vii) From Langton Burn, about 400 yards N.—NE. of Gavinton ;
Lepidodendron spitsbergense Nath.

" In addition some small blocks of a shelly limestone were found in the shingle on the Whitadder immediately below the right bank scaur under Edrom Church. The plant

remains in these are not so well preserved as those in the Langton Burn material, but the blocks contain much the same species. The Edrom material has, however, yielded a *Heterangium*, a genus not previously met with in Berwickshire." This species was probably the one that Gordon included under the name of *Rhetinangium arberi* (Gordon, 1912, p. 814).

Dr. Kidston also gave a list of species from Marshall Meadows Bay.

In the Summary of Progress of the Geological Survey for 1902 (Kidston 1903) Dr. Kidston published lists of fossil plants collected by Mr A. Macconochie in the neighbourhood of Cockburnspath, and those which occur in Berwickshire are quoted below :

- (i) From a $\frac{1}{4}$ mile and 50 yards E.—S.E. of entrance to Cove Harbour ;
Stigmaria ficoides var. *undulata* Göppert.
- (ii) From 90 yards S. of entrance to Cove Harbour, in shale and in an ironstone band in the shale on horizon of Scremerston Series ;
Rhodea moravica Ett.
Cardiopteris polymorpha Göpp. (this was undoubtedly a *Cardiopteridium*, probably *C. nanum* f. *spetsbergense*, see Walton, 1941, p. 61).
- (iii) From shore, a little below high water mark, 90 yards S. of entrance to Cove Harbour. Horizon about 30 feet below lowest of Cove Limestones ;
Sphenopteris dissecta Brongn. (*Diplotmena dissecta*).
Cardiopteris polymorpha var. *rotundifolia* Göpp.
(*Cardiopteridium* sp.).
Asterocalamites scrobiculatus Schl.
Lepidophyllum lanceolatus L. & H.
- (iv) From outcrop in slope above Cove Harbour in sandstone and red ironstone band ; same band as (ii) above :
Calymmatotheca affine L. & H. (*Telangium affine*).
Cardiopteris polymorpha var. *rotundifolia* Göpp. (*Cardiopteridium* sp.).
The isolated pinnules of this fern fill a band of red ironstone 2-3 inches thick.

Asterocalamites scrobiculatus Schl.

Lepidodendron Rhodeanum Sternb.

Lepidophyllum lanceolatum L. & H.

Lepidostrobus sp.

- (v) From bay N.-W. of Cove in shale resting on oil shale band. About 2 feet above Lowest Cove Limestone :

Calymmatotheca affinis L. & H.

Arising out of these discoveries of Mr. Macconochie and Dr. Kidston in Berwickshire, about the beginning of the century, a number of new species of fossil plants have been described by different workers at different times extending up to the present day.

In 1910 Count Solms Laubach described and figured one of the Langton Burn fossils under the name of *Cladoxylon kidstoni* (Solms Laubach, 1910). Accounts of this imperfect fossil stem are given by Seward (1917, p. 205) and Scott (1923 p. 160). The species is the only one of its genus known in Britain. According to Dr. Scott, the specimen is part of a rather large stem containing an incomplete ring of steles. In each stele there is a narrow band of primary wood and a broad zone of secondary wood, in which the pitting is limited to the radial walls. Some of the pits are circular, as in Conifers, others transversely elongated. The narrow medullary rays are mostly uniseriate.

In view of the rarity of this fossil plant and our incomplete knowledge of it, new specimens would be of great interest. Professor Seward regarded the evidence for assigning it to the genus *Cladoxylon* as not convincing.

In 1911 P. Bertrand described an incomplete stem of a small fern under the name *Zygopteris kidstoni* (Bertrand, 1911a and b). This was later figured by H. S. Holden in his account of the Upper Carboniferous fern *Ankyropteris corrugata* (Holden, 1930). Hirmer has re-named the plant *Protoclepsydropsis kidstoni* (Hirmer, 1927, p. 519). The specimen which Dr. Kidston found in the Langton Burn material was incomplete, consisting of a decorticated stem with a solid stellate protostele without petioles. Further specimens of this primitive fern have been found recently by the writer at Hutton Mill, and near Allanbank.

In 1912 the specimen of *Stenomyelon tuedianum* discovered in 1901 at Norham Bridge was described in a joint paper by Dr. Kidston and Professor D. T. Gwynne-Vaughan. It is clear that Dr. Kidston envisaged a series of papers on the Carboniferous Flora of Berwickshire, since this was entitled Part I. Owing probably to the death of Professor Gwynne-Vaughan in 1915 and Dr. Kidston's decision to investigate the silicified plants of the Rhynie chert bed in collaboration with Professor W. H. Lang, the series of papers on Berwickshire fossil plants was discontinued.

In their paper on *Stenomyelon tuedianum* Kidston and Gwynne-Vaughan declined to suggest any affinities for this fossil plant, beyond placing it in the Cycadofilices (Pteridospermae). They were also unable to describe the leaf adequately, though they knew that it must have been large in size, and they thought that "the lamina must have been of considerable thickness."

Other decorticated stems of *Stenomyelon* occurring in the Langton Burn material were later named *S. tripartitum* Kidston, but the species was not described by Dr. Kidston. A brief description is given by Dr. Scott (Scott, 1923, pp. 141-143), and photographs were included by Krausel and Weyland in their account of *Aneurophyton germanicum*, with which *Stenomyelon* was compared (Krausel and Weyland, 1929, p. 323). Dr. Scott considered that *Stenomyelon* came low down among the Pteridosperms, its nearest probable relationship being with the Calamopityeae.

In 1938 Dr. Mary G. Calder reinvestigated the sections of *Stenomyelon tripartitum*, and came to the conclusion that it could not be considered distinct from *Stenomyelon tuedianum* (Calder, 1938, p. 310).

The only other species of *Stenomyelon* yet discovered is *S. muratum* Read, which comes from the New Albany Shale (late Devonian) of North America. This species has a "mixed pith" and is, therefore, slightly more advanced than *S. tuedianum*. Read considers that *Stenomyelon* is probably in the lineage of the more primitive Calamopityeae rather than in a separate family (Read, 1936, p. 81).

The Calamopityeae are still very imperfectly known, as their foliage and fructifications have not yet been described.

It is evident, therefore, that the fossil plant which Adam Matheson discovered at Norham Bridge about 100 years ago is still far from being understood in its structure and relationships.

In the years 1923-25 Dr. Kidston published his great work on "*The Fossil Plants of the Carboniferous Rocks of Great Britain.*" According to Dr. Crookall, this monograph was to have been completed in about ten parts. The six parts published form the second volume of the Palaeontological Series of the Memoirs of the Geological Survey, and consist of 681 pages and 153 plates covering most of the Ferns and Pteridosperms. The Lycopodiales, Sphenophyllales, and Equisetales remained undescribed.

On p. 18 Dr. Kidston stresses the abundance of Pteridosperms (seed-ferns) in the Lower Carboniferous rocks, and adds: "Were it not for the fact that true ferns have been found as petrifications in the Pettycur material and in Berwickshire, there would have been no absolute proof of their occurrence in British Lower Carboniferous rocks." On p. 19 he gives a list of the petrified fossil plants so far discovered in Berwickshire, all of them coming from the Cementstone Group. These are here quoted:

Fern—*Zygopteris kidstoni* Bertrand.

Pteridosperms—

Rhetinangium cf. *Arberi* Gordon.

Stenomyelon tuedianum Kidston.

Lyginorachis papilio Kidston MS.

Cladoxylon kidstoni Solms.

Rhachiopteris multifascicula Kidston MS. (*Kalymma tuediana* Calder).

Other Gymnosperms—

Eristophyton (*Calamopitys*) *Beinertiana* Göpp.

Pitys antiqua Witham.

Pitys primaeva Witham.

Dr. Kidston also gave descriptive accounts of several fossil plants recorded from Berwickshire and summarised the localities from which they were obtained. These records I have arranged below in alphabetical order:

- (i) *Alcicornopteris convoluta* Kidston (pp. 418-420).

This is figured on Pl. CVIII, fig. 2b, from shore $\frac{1}{2}$ mile east of Cove Harbour, and fig. 3, from right bank of Whitadder $\frac{3}{4}$ mile below Allanton. Other localities given are: Broomhouse Burn, nr. Duns; North bank of Whitadder between Edington Mill and Hutton Bridge (J. H. Craw); Lennel Braes scaur on S.E. side of Churchyard $\frac{1}{4}$ mile N.E. of Lennel Village; Kimmerghame Quarry, near Duns.

- (ii) *Aneimites acadica* Dawson (p. 414).

This is figured on Pl. CX, figs. 4-7. Of the specimen shown on fig. 4 Dr. Kidston wrote: "This is the most perfect example I have seen. It was collected by the late T. Ovens, of Foulden, and after his death was given to me by his father, to whom my thanks are due for the interesting specimen." Of its distribution, Dr. Kidston said it was "very rare in Britain and restricted to the Cementstone Group of the Calcareous Sandstone Series." He cited three Berwickshire localities: Left bank of Crooked Burn about 50 yards below Foulden Newton; right bank of Whitadder, $\frac{3}{4}$ mile below Allanton; Bellsburn Scaur, near Chirnside.

- (iii) cf. *Coseleya* sp. (pp. 371-2).

This is figured on Pl. LXXVI, fig. 7 and 7a. The fossil consists of a small specimen showing exannulate sporangia unassociated with foliage pinnules, and came from the left bank of the Crooked Burn, 50 yards below Foulden Newton.

- (iv) *Diploptomena (Sphenopteris) dissectum* Brongt. (p. 248).

This is figured on Pl. LX, figs. 1-5, and text-fig. 15, p. 240. The species is only known from the oil-shale group and is recorded by Dr. Kidston from about 30 feet below the lowest of the Cove Limestones on the shore, a little below high water mark 90 yards south of Cove Harbour, Cockburnspath. It is also recorded from a shale a few feet below the coals at Marshall Meadows, $2\frac{1}{2}$ miles N.W. of Berwick-upon-Tweed.

- (v) *Diploptomena (Sphenopteris) patentissima* Ett., (p. 253).

This is figured on Pl. LIV, fig. 6, and is recorded from Lennel Braes, near Coldstream.

- (vi) *Ootheca globosa* Kidston (pp. 371-2).

This is figured on Pl. LXXI, fig. 6 and 6a, and consists of a fragment of a rachis showing globular exannulate sporangia at the apex. The specimen came from the left bank of the Crooked Burn, 50 yards below Foulden Newton and was collected by T. Ovens.

- (vii) *Sphenopteridium pachyrrachis* Göpp. (p. 168).

This is figured on Pl. XXXIX, fig. 5 (from Long Craig Bay, $1\frac{1}{2}$ miles west of Dunbar). Kidston's Berwickshire record was from $\frac{3}{4}$ mile below Allanton on right bank of Whitadder. It is possible that this was the fossil plant which Kidston had recorded previously as *Sphenopteris elegans*.

- (viii) *Telangium affine* L. & H. (*Calymmatotheca affinis* Kidston) (p. 446).

This is figured on Pl. C ; Pl. CI ; Pl. CII, fig. 1 ; Pl. CIV, fig. 5 ; and text-figs. 41-43. It was also figured by Hugh Miller in his "*Testimony of the Rocks*" (frontispiece). This fossil plant is only recorded from the oil shale group of the Calciferous Sandstone Series, where it is a very characteristic species. Dr. Kidston recorded it from two Berwickshire localities : sandstone and red ironstone band on horizon of Scremerston beds in outcrop in slope above Cove Harbour ; shale resting on oil-shale band about two feet above lowest Cove Limestones in bay N.W. of Cove Shore west of harbour, Cove.

- (ix) *Zeilleria moravica* Ett. (*Rhodea moravica* Ett.) (p. 441).

This is figured on Pl. LXII, figs. 3-5 ; and Pl. CXIII, fig. 4 (not Berwickshire specimens). The species occurs in both the Carboniferous Limestone Series and in the oil-shale group of the Calciferous Sandstone Series. The only record from Berwickshire comes from a shale and ironstone band on the horizon of the Scremerston Coal Strata, 90 yards south of the entrance to Cove Harbour.

Although Kidston had recorded *Diplotmena adiantoides*

Schlotheim (*Sphenopteris elegans* Brongt.) from the Whitadder near Allanton and near Edrom in the Summaries of Progress (Kidston 1901 and 1902), there are no records stated in "*The Fossil Plants of the Carboniferous Rocks of Great Britain.*" This would suggest that the fossil plants originally identified as *S. elegans* were something different; e.g., they may have been *Sphenopteridium pachyrrachis* Göpp.

In 1927 Errol I. White of the British Museum (Nat. Hist.) published "*The Fish Fauna of the Cementstones of Foulden, Berwickshire.*" To this was appended a list of Lower Carboniferous Plants by W. N. Edwards (White, 1927). The collection on which this paper was based was made by Thomas Middlemiss Ovens, an amateur geologist of Foulden, who died in 1912 at the early age of twenty, and who was mentioned by Mr. James H. Craw, former Secretary of the Club, in 1921 (H.B.N.C., Vol. XXIV, p. 287).

A biographical sketch of T. M. Ovens was published in *The Border Magazine* for October 1927, together with a portrait showing Ovens at work on an exposure. I am indebted to Rev. David S. Leslie of Hutton for drawing my attention to this article and for the loan of a copy which was actually given to him by Martha Helen Ovens (the mother of T. M. Ovens) then resident at Mansfield, Foulden. According to Mr Leslie the father of T. M. Ovens was gardener to Major Wilkie at Foulden House.

The writer of this biographical sketch acknowledged assistance in compiling his account from Rev. Dr. Maconnachie, Mr James Hewat Craw, Mr Robert Eckford of the Geological Survey, and Rev. John Reid, Edinburgh, formerly of Foulden.

According to Mr Eckford, "Thomas Middlemiss Ovens was born 6th June 1891, and died 30th March 1912. The dread malady that ultimately claimed him as a victim was the cause . . . that drove him to fossil collecting when his hours at the bank were over . . . A word of praise is due to the late Mr Arthur Macconochie, of H.M. Geological Survey, for the encouragement and help he gave to Mr Ovens. Mr Macconochie was quick in detecting the importance of Mr Ovens' find and had the specimens submitted to the late Dr. Traquair, at that time the authority on fossil fishes. Dr. Traquair reported that the fauna contained a number of species hitherto

new to the British Isles. This was great news to Mr Ovens, who applied himself with still greater zeal to unearthing these ancient life relics of far-off times. Unfortunately, Dr. Traquair died before the collection was completed. Then the war intervened, and the collection lay in Edinburgh until 1921, when it was sent to the British Museum, London."

The Rev. John Reid reported on T. M. Ovens as follows : " Mr Thomas Ovens, as I remember him, was a quiet, contemplative lad . . . preferring to go to nature for his pleasures and excitements. In the course of the River Whitadder, with its haughs, cliffs and escarpments, he found a fertile source of interest and study . . . After leaving school he obtained employment in a bank at Coldstream, but the confinement proved too trying for a constitution which was never very robust, and he was advised to try some open-air occupation. This suited his natural inclination, and he entered with zeal into the study of geology . . . but the disease that has blighted so many promising lives had too firm a hold upon him . . . He was laid to rest in early manhood in the churchyard of that parish from which he had never long been severed."

From the Church " Life and Work " supplement, May 1912, the following excerpt is quoted : " It is pathetic to relate that two days after Mr. Ovens died, a letter addressed to him was received from Mr Macconochie . . . , in which he offered him, when he attained the age of 21, the Madam Pidgeon Fund of £30 yearly to help him to prosecute his geological researches."

From an article in the "*Berwickshire Advertiser*" we learn that " all Ovens's fossils were collected in the short space of two years, 1910-1912. The fishes alone included four genera new to science, and six new species. Up to November 1924, nearly half the specimens had been identified, and as it was felt that it would be a pity to divide the collection, the British Museum authorities approached Mr and Mrs Ovens, Foulden, and asked to be allowed to have the whole collection. Very generously, Mr and Mrs Ovens consented to do so."

From this article we also learn that Ovens had been employed at the British Linen Bank in Coldstream. Further, " it was Mr John Bishop, Berwick, who first interested Ovens in geology, and with Geikie's *Geological Survey of Scotland* borrowed from the village library, he had the best text-book

that was then to be had for the vicinity of his own home at Foulden, to which area he very naturally turned for specimens.

“When Geikie surveyed the area in 1864, fossil scales were found (at the Crooked Burn), and friends of Ovens still recall the delight of the young geologist when he got his first fossil specimen—a fossil scale. This spurred him on to other finds, and Nature was remarkably generous to him in revealing her secrets which had been buried for countless years.”

In the opening paragraph of his paper Dr. Errol White says : “So barren of fossil remains is the Cementstone Group of the Scottish Lower Carboniferous Rocks that any addition to our knowledge of the fauna and flora of the period is especially welcome.

“The collection to be described below contained nearly 150 specimens and includes Plants, Lamellibranchs, Annelids, Arthropods, and Fishes. All the specimens were obtained from sections exposed in the Crooked Burn, 50 yards below Newton Farm, in the parish of Foulden.

“The beds in which the remains were found belong to an horizon quite near the base of the Cementstones, and consequently the fauna is one of the earliest known from Lower Carboniferous Rocks.

“The lithology of the beds is somewhat inconstant, in a manner typical of these shallow water deposits ; all are argillaceous and highly charged with lime. The rock in the majority of cases is a fine-grained, somewhat sandy shale, and contains a fair sprinkling of mica. In a few instances the sandy element is coarse and predominates, while in others it is wanting, and the rock is a very fine-grained, horny, mudstone with conchoidal fracture. The series is therefore, typically estuarine in character . . .

“This fine collection owes its existence to the zeal of the late Thomas Middlemiss Ovens, an enthusiastic young local geologist, and the state of the specimens is a tribute to his careful and skilled collecting. It is greatly to be deplored that Mr Ovens’ activities have been cut short by his untimely death at the age of nineteen.

“Mr and Mrs John Ovens, of Foulden, have generously presented their son’s collection to the British Museum. The majority of the plants, however, had been sent to the late Dr.

Kidston during the lifetime of the collector, and are now in the Jermyn Street Museum. They are partly described in the *Memoirs of the Geological Survey of Great Britain* (Palaeontology, vol. II, 1923-26), and a note on the specimens in the British Museum is here appended by Mr W. N. Edwards."

In this appendix Mr W. N. Edwards wrote: "The plant remains in the Thomas Ovens Collection from Lower Carboniferous (Tuedian) rocks near Foulden, Berwickshire, are of considerable interest, though few species are represented. Some have already been described by Kidston and are in the Kidston Collection at the Museum of Practical Geology, Jermyn Street. In addition to those mentioned below, there are branched fragments of a Pteridosperm rachis, impressions of larger stems and some other obscure specimens. Numerous examples of *Spirorbis* occur on the plant remains.

Edwards then gave a list of the species; from this list certain points are quoted below:

- (i) *Aneimites acadica* Dawson.

This is "the commonest plant at Foulden." (B.M. Geol. Dept. V 16860-64).

- (ii) *Sphenopteris* (*Telangium*) *affinis* L. & H.

"This Pteridosperm frond (V 16865) has previously been recorded only from the oil-shale group where it is abundant."

- (iii) *Ootheca globosa* Kidston.

"Probably the microsporangia of Pteridosperms" (Kidston).

- (iv) cf. *Coseleya* sp.

"On a piece of shale (V 16888) are three groups of sporangia of the same type as Kidston figured. *Coseleya* is otherwise known only from the Westphalian, and it seems improbable that the Foulden specimens really belong to that genus."

- (v) Fructification of a Pteridosperm.

"Some specimens of a much larger fructification, and of some seed-like bodies, will not be described in detail here, since there are numerous better examples in the Kidston collection, which will doubtless be described in a

forthcoming volume of the *Survey Memoirs*, when Kidston's work is completed.

"The Kidston collection also contains some specimens which may provisionally be referred to as *Carpolithus* sp.

(vi) *Lepidodendron* sp.

"A single fragment of a stem showing structure (V 16870) apparently belongs to the genus *Lepidodendron*. It is interesting as evidence of the occurrence of petrified material at Foulden. Impressions of *Lepidodendroid* twigs (V 16872) occur in a coarse sandstone matrix, and in the shale are isolated megaspores (V 16871) like those of *Lepidostrobus*, with capitate appendages."

In 1931 Dr. Crookall figured sections of *Lyginorachis papilio* Kidston from Norham Bridge (Crookall, 1931). The specimen was discovered by Dr. Kidston and was first described by Dr. Scott (Scott, 1923, pp. 57-59). The genus *Lyginorachis* was erected by Dr. Kidston (1923, p. 18) for isolated petioles of Pteridosperms having characters similar to those of the petiole of *Lyginopteris* (formerly known as *Rachiopteris aspera* Will.). The petiole of *Lyginorachis papilio* measures 8 x 6 mms. in cross section, and is flattened on what was probably the upper side. It contains a large U-shaped bundle concave upwards and with about ten protoxylem groups on the convex side. The tracheids bear multiseriate bordered pits. The outer cortex has the "*Dictyoxylon*" type of fibrous network. Dr. Scott considered that the petiole has more in common with *Lyginopteris* than any other known genus. Dr. Crookall also figured a smaller and simpler petiole from the Langton Burn, near Gavinton, but left it incompletely named as "*Lyginorachis* sp."

In 1935 Dr. Mary G. Calder described two new species of *Lyginorachis* from the West of Scotland (Calder 1935). One of these, *Lyginorachis waltoni*, occurred on the Isle of Arran. It is of interest that further specimens have now been found in Berwickshire at Langton Glen, Hutton Bridge and the Ladykirk Burn.

Dr. Calder also described two species of *Lepidodendron* from the Langton Burn, near Gavinton (Calder, 1934, pp 118-122). One of these, *Lepidodendron brevifolium* Will., has

a medullated stele, and was originally described from Burntisland. It has often been referred to the impression species *Lepidodendron Veltheimianum* Sternberg. The other species has a solid protostele, and most specimens show no secondary xylem. This species is very common in Berwickshire, and is unusual in that it lacks clearly defined leaf cushions. Recently it has been reinvestigated along with specimens from Arran, and re-named *Levicaulis arranensis* (Beck 1958). The smallest axes have been shown to have the leaves attached directly to the stem surface without any evidence of leaf cushions. Furthermore, no ligules have yet been observed at the leaf bases. Although Beck figured a tangential section through the outer cortex, he had no specimen showing the external features of a petrified stem. Such specimens, seen by myself in Berwickshire, show narrow, elongated diamond-shaped areas similar to the surface appearance of *Lepidodendron*. It is possible, therefore, that *Levicaulis arranense* represents a primitive forerunner of the typical form of *Lepidodendron*, having its leaves borne on non-projecting areas similar in outline to true leaf cushions.

Perhaps the most interesting fossils described by Dr. Calder from the Kidston Collection of Fossil Plant Slides, are two seeds named *Calymmatotheca kidstoni* and *Samaropsis scotica*. Both these I have re-investigated from new material from several localities in Berwickshire, as well as from the Langton Burn, near Gavinton, where most of Dr. Kidston's specimens originated. It is hoped to publish a full description of these seeds elsewhere. *C. kidstoni* is to be re-named *Genomosperma kidstoni* (Calder) and is of interest in possessing a free nucellus (or megasporangium) surrounded by an integument consisting usually of eight free lobes which diverge at their apices. A second species, *G. latens*, is very similar, but has the integumental lobes joined for a short distance at their bases and convergent at their apices, where they simulate a micropyle.

Samaropsis scotica Calder is a platyspermic seed of Pteridospermous affinity, and possesses a wide funnel-like salpinx between two diverging apical horns. It appears to be identical with Kidston's compression seed *Samaropsis bicaudata* (originally named *Cardiocarpus bicaudatus*), which he obtained at Edrom and below Allanton.

Samaropsis scotica is frequently associated with the stem *Stenomyelon tuedianum* and large petioles known as *Kalymma tuediana* Calder, also described by Dr. Calder from the Langton Burn, Norham Bridge, and Edrom (Calder, 1938, pp. 312-329). I have evidence which suggests that *Kalymma tuediana* is the petiole of a large frond borne on *Stenomyelon tuedianum*. This agrees with the Calamopityean affinity of *Stenomyelon*. It would be of still greater interest if *Samaropsis scotica* should prove to be the seed of *Stenomyelon*, since at present we have no knowledge of any fructification belonging to the Calamopityeae.

In 1953 W. G. Chaloner described the megaspores from a new species of *Lepidostrobus* (*L. allantonense*) from the Kidston Collection in the Geological Survey Museum, London (Chaloner, 1953). The material was collected from the right bank of the Whitadder, one mile east of Allanton at the locality known as "Willie's Hole." Chaloner identified the megaspores with the dispersed spores known as *Triletes crassiaculeatus* Zerndt (sensu Dijkstra 1946). The cone itself is 11 cms. or more in length and 12-16 mms. diameter. The megaspores have a mean diameter of 1.383 mms. and possess an apical prominence and spines typically 200 μ in length. The spines taper to a fine point; smaller subsidiary spines 35 μ long are also present. The megaspore wall is typically 20 μ thick. The microspores are unknown. Chaloner suggested that *Lepidostrobus allantonense* may be the cone of *Lepidodendron nathorsti* Kidston.

In 1958 Chaloner described some dispersed spore tetrads from two coals outcropping in Cove harbour and elsewhere. These tetrads named by Chaloner *Didymosporites scotti*, consist of two large fertile spores and two minute abortive spores. They were extracted from the coal by maceration in Schulze's solution (saturated potassium chlorate in concentrated nitric acid) for several days. After maceration the acid solution was decanted, and the coal washed, then treated with dilute sodium hydroxide solution. Finally the residue was washed, and separated into size grades by sieving. The interest of these spores is that they agree with those occurring in the megasporangia of the primitive fern *Stauropteris burntislandica*, described from Pettycur. Formerly these

sporangia were given the name *Bensonites fusiformis* and were regarded as glandular bodies. Chaloner's discovery shows that *Stauropteris burntislandica* was among the plants which formed the Cove coals. In addition I have found the plant in a petrified condition in four other Berwickshire localities, viz.: Langton Glen, Whitadder below Chirnside Bridge, near Hutton Bridge, and on the Blackadder, below Allanbank Mill. As yet the stem of *Stauropteris* has never been discovered, and some palaeobotanists have doubted whether it possessed one. It is therefore a fossil plant worthy of further investigation.

One other line of research which is only in its infancy so far as Berwickshire is concerned, is the investigation of the plants present in peat deposits. As long ago as 1835, David Milne had noted the remains of trees—mainly birch and hazel nuts—in the peat mosses of Whiterigg, Whitburn, and Dogden. In 1948, G. F. Mitchell described late glacial deposits at Whitrig Bog, which lies $6\frac{1}{2}$ miles west of Kelso, at 500 feet. Formerly a brick and tile works had extracted clay at the western end of the bog, and it was near here, at the N.W. margin, that Dr. Mitchell and Dr. Godwin obtained plant samples from the marls and clay below the peat. Among the plant remains discovered were: *Betula nana* (Dwarf Birch), *Thalictrum alpinum* (Alpine Meadow Rue), *Salix herbacea* (Least Willow), and *Salix reticulata* (Reticulate Willow). These are typical Arctic-Alpine plants now absent from Berwickshire, and they indicate the type of flora which prevailed in late glacial times. Some of the plant remains from Whitrig Bog are figured by Dr. Godwin in his book "*The History of the British Flora*," Pl. XV, and Pl. XXVI. There is little doubt that similar research in other bogs such as Gordon Moss, Penmanshiel Moss, and Jordan Law Moss, would produce similar interesting results. What is true for these recent deposits is still also true of the more ancient rocks; new species probably await discovery, and whenever our rivers run in flood, it is possible that new specimens will be uncovered or new strata laid bare for the observant naturalist with an eye for such things.

REFERENCES TO LITERATURE.

(Arranged in Chronological Order).

- 1843 MILNE, DAVID. Geological Account of Roxburghshire, *Trans. Roy. Soc. Edin.*, Vol. XV, pp. 433-502.
- 1864 JEFFREY, ALEX. "*The History and Antiquities of Roxburghshire and adjoining Districts.*" Vol. IV., Second Edition, Preface. Edinburgh.
- 1886 BENNIE, J., and KIDSTON, R. "On the Occurrence of Spores in the Carboniferous Formation of Scotland," *Proc. Roy. Phys. Soc.*, Vol. IX, pp. 82-117.
- 1901 KIDSTON, R. Summary of Progress of the Geological Survey for 1900, (*Mem. Geol. Surv.*), pp. 174-175.
- 1902 KIDSTON, R. Summary of Progress of the Geological Survey for 1901, (*Mem. Geol. Surv.*), pp. 179-180.
- 1903 KIDSTON, R. Summary of Progress of the Geological Survey for 1902, (*Mem. Geol. Surv.*), pp. 135-137.
- 1910 SOLMS-LAUBACH, GRAF ZU, Über die in den Kalksteinen des Culm von Glatzisch-Falkenberg in Schlesien erhaltenen structurbietenden Pflanzenreste. *Zeitsch. Bot.*, Jahrg. II., Heft VIII, p. 537, Pl. III, figs. 7, 11, 13.
- 1911 (a) BERTRAND, P. Structure des stipes d'*Asterochloena laxa* Stenzel. *Memoires de la Société Géologique du Nord*, Tome VII., 1, p. 55.
- 1911 (b) BERTRAND, P. *L'étude anatomique des Fougères anciennes et les problèmes qu'elle soulève*, p. 258.
- 1912 KIDSTON, R., and GWYNNE-VAUGHAN, D. T. On the Carboniferous Flora of Berwickshire, Part I, *Stenomylon tuedianum* Kidston, *Trans. Roy. Soc. Edin.*, Vol. XLVIII, pp. 263-271.
- 1912 GORDON, W. T. On *Rhetinangium arberi*, a new genus of Cycadofilices from the Calciferous Sandstone Series, *Trans. Roy. Soc. Edin.*, Vol. XLVIII, p. 814.
- 1917 SEWARD, A. C. *Fossil Plants*, Vol. III, p. 205.
- 1921 CRAW, J. H. Report of Meetings, 1921, *H.B.N.C.*, Vol. XXIV, p. 287.
- 1923 SCOTT, D. H. *Studies in Fossil Botany*, Pt. II, 3rd ed.
- 1923-25 KIDSTON, R. Fossil Plants of the Carboniferous Rocks of Great Britain, (*Mem. Geol. Surv.*).
- 1924 HORNE, JOHN. Obituary notice of Mr A. Macconochie, *Trans. Edin. Geol. Soc.*, Vol. XI, pp. 395-397.
- 1924 SCOTT, D. H. *Extinct Plants and Problems of Evolution*; Macmillan and Co., London; p. 162.
- 1927 HIRMER, M. *Handbuch der Palaobotanik*, Vol. 1; München und Berlin; p. 519.

- 1927 WHITE, E. I. "The Fish-Fauna of the Cementstones of Foulden, Berwickshire," *Trans. Roy. Soc. Edin.*, Vol. LV, pp. 255-287.
- 1927 SANDERSON, W. (editor). "The Late Thomas Middlemiss Ovens," *Border Magazine*, Vol. XXXII, No. 382, pp. 145-147, with portrait.
- 1929 KRAUSEL, R. and WEYLAND, H. "Beitrage zur Kenntnis der Devonflora," *Abh. Secken. Naturforsch. Ges.*, Vol. XLI, lief 7.
- 1930 HOLDEN, H. S. "On the structure and affinities of *Ankyropteris corrugata*," *Phil. Trans. Roy. Soc.*, b, Vol. CCXVIII, pp. 79-114.
- 1931 CROOKALL, R. "The genus *Lyginorachis* Kidston," *Proc. Roy. Soc. Edin.*, Vol. LI, pp. 27-34.
- 1934 CALDER, M. G. "Notes on the Kidston Collection of Fossil Plant Slides: No. VI, on the structure of two *Lepidodendroid* stems from the Carboniferous Flora of Berwickshire," *Trans. Roy. Soc. Edin.*, Vol. LVIII, pp. 118-124.
- 1935 CALDER, M. G. "Further Observations on the Genus *Lyginorachis* Kidston," *Trans. Roy. Soc. Edin.*, Vol. LVIII, pp. 549-559.
- 1936 READ, C. B. "The Flora of the New Albany Shale," Pt. 2, "The Calamopityeae and their relationships," *U.S. Dept. Int. Geol. Surv. Prof. Paper.*, 186 E, Shorter contributions to general geology, pp. 81-104.
- 1938 CALDER, M. G. "On some undescribed species from the Lower Carboniferous Flora of Berwickshire; together with a note on the Genus *Stenomyelon* Kidston," *Trans. Roy. Soc. Edin.*, Vol. LIX, pp. 309-331.
- 1938 CROOKALL, R. The Kidston Collection of Fossil Plants, With an Account of the Life and Work of Robert Kidston, (*Mem. Geol. Surv.*).
- 1941 WALTON, J. On *Cardiopteridium*, a genus of Fossil Plants of Lower Carboniferous Age, with Special Reference to Scottish Specimens, *Proc. Roy. Soc. Edin.*, B., Vol. LXI., pp. 59-66.
- 1948 MITCHELL, G. F. Late Glacial Deposits in Berwickshire, *New Phytol.*, 47, p. 262.
- 1953 CHALONER, W. G. "On the Megaspores of Four Species of *Lepidostrobus*," *Ann. of Bot.*, N.S., Vol. XVII, pp. 273-291.
- 1956 GODWIN, H. *The History of the British Flora*; Cambridge; pp. 19, 307, 315.
- 1958 BECK, C. B. "*Levicaulis arranensis*" gen. et sp. nov., a Lycopsid axis from the Lower Carboniferous of Scotland, *Trans. Roy. Soc. Edin.*, Vol. LXIII, pp. 445-456.
- 1958 CHALONER, W. G. Isolated Megaspore Tetrads of *Stauropteris burntislandica*. *Ann. of Bot.*, N.S., Vol. 22, pp. 197-204.

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part III.

By A. G. LONG, M.Sc., F.R.E.S.

SUPER-FAMILY BOMBYCES.

Family NOTODONTIDAE.

* 41. *Cerura hermelina* Goeze (*bifida* Hübn).

Poplar Kitten. 94.

- 1874 Ayton, one larva which proved to have been stung
(W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).
1925 " Shaw took two larvæ at Ayton, one in 1873, the other
in 1874, but could never afterwards find another "
(G. Bolam, *H.B.N.C.*, Vol. XXV, p. 368).

Summary.—This species is generally regarded as being absent from Scotland, so that it would be of great interest to obtain further records. The planting of young poplars in many districts in the last few years should favour such species and may lead to their increase.

42. *Cerura furcula* Linn. Sallow Kitten. 95.

- 1873 Thirlestane Castle, one caught at rest among willows
(A. Kelly, *H.B.N.C.*, Vol. VII, p. 123).
1876 Ayton, two taken by Alex. White (S. Buglass, *H.B.N.C.*,
Vol. VIII, p. 127).
1877 Ayton woods, two larvæ on dwarf willows (S. Buglass,
H.B.N.C., Vol. VIII, p. 322).
1902 Lauderdale, rare (A. Kelly, in *Lauder and Lauderdale*,
p. 303).
1925 Dr Hardy in a letter written in 1874 said that " the
larvæ abound on willows on Coldingham Moor and
in some of our deans." Other localities are Reston,
Gordon Moss, Lithtillum, Preston, Ladykirk, and

several others (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 567).

- 1952 Kyles Hill, one larva on sallow, August 28; the moth emerged on 22.6.53 (A. G. Long, *H.B.N.C.*, Vol. XXXII, p. 184).
- 1953 Kyles Hill, one larva, August 21; Coldingham Moor, six larvæ, August 27 (A. G. L.).
- 1954 Coldingham Moor, one larva (stung), August 26 (A. G. L.).
- 1955 Oxendean Pond, one imago at m.v. light, June 13 (A. G. L.).
- 1956 Gordon Moss, three in light-trap, June 11 (E. C. Pelham-Clinton); also one, June 14 (A. G. L.). Bell Wood, one, June 23; Gavinton, one, June 25 (A. G. L.).

Summary.—Widely distributed on both high and low ground apparently all over the County, but not very common.

43. *Cerura vinula* Linn. Puss. 96.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1875 Preston, many old cocoons (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
- 1890 Cockburnspath and Swinton (J. Hardy, *H.B.N.C.*, Vol. XIII, p. 84).
- 1902 Lauderdale, not very rare (A. Kelly in *Lauder and Lauderdale*, p. 303).
- 1911 St. Abbs Lighthouse, one female, May 25 (W. Evans, *Scot. Nat.*, 1914, p. 230).
- 1925 More or less common all over the district (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 368).
- 1949 Bonkyl Lodge, larvæ on poplar suckers (A. G. L.).
- 1952 Below Cumledge Bridge, four larvæ on young willows, first imago emerged 24.5.53 (A. G. L.).
- 1953 Duns, three imagines on May 5, 20 and 21; Byrecleugh, five larvæ on scrubby sallows among heather, August 27 (A. G. L.).
- 1954 Duns Castle Woods and Burnhouses, eight larvæ on young poplars, August 11; Coldingham Moor, one larva, August 26 (A. G. L.).

- 1955 Coldingham Moor, two larvæ on willows, August 3 (A. G. L.).
- 1956 Coldstream, one imago, May 10; Gordon Moss, one male at m.v. light, May 21; Burnmouth, one larva on poplar, July 23; Cockburnspath, two larvæ on young poplars in cemetery and one near Reed Bay, August 1 (A. G. L.).
- 1957 Gordon Moss, one at m.v. light, June 8 (E. C. Pelham-Clinton).

Summary.—Widespread and fairly common from the coast to the moors, flying from first week of May until mid-June.

44. *Drymonia ruficornis* Hufn (*chaonia* Hübn).

Lunar Marbled Brown. 100.

- 1925 Bolam had no Berwickshire record (*H.B.N.C.*, Vol. XXV, p. 570).
- 1952 Gavinton, five at street lamps, May 17-25 (*H.B.N.C.*, Vol. XXII, p. 184).
- 1953 Gavinton, nine at street lamps, May 4 and 5 (A. G. L.).
- 1954 Gavinton, seven at street lamps, May 12-29 (A. G. L.).
- 1955 Oxendean Pond, one at m.v. light, May 9; Retreat, nine at m.v. light, May 23 and 31; Kyles Hill, one at m.v. light, May 24 (A. G. L.).
- 1956 Hirsell—Kincham Wood and Montague Drive, six at m.v. light, including one female, May 5-19; Gavinton, one, May 22; Kyles Hill, two at m.v. light, May 23; Aiky Wood (Duns-Grants house road), one larva beaten from oak, July 21 (A. G. L.).

Summary.—Well distributed in the County wherever there are oak-woods, emerging about the first week in May. It comes to m.v. street lamps and sits a foot or two below the lamp.

45. *Pheosia tremula* Clerck

Greater Swallow Prominent. 101.

- 1873 Lauder, one sheltering during a strong wind on a poplar tree near the Luggy (A. Kelly, *H.B.N.C.*, Vol. VII., p. 123).

- 1874 Duns, reared from a pupa got in Easter Bogs by D. and T. Stevenson (J. Ferguson, *H.B.N.C.*, Vol. VII, p. 284).
- 1876 Ayton, Peelwalls, one from pupa (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
- 1902 On poplars, never common (A. Kelly in *Lauder and Lauderdale*, p. 303).
- 1925 Scattered all over the district, larvæ on poplars, sallows and willows (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 569).
- 1953 Elba, six larvæ on aspens, August 14 ; between Aiky Wood and Grantshouse, two larvæ on low branches of large poplars, August 27 (A. G. L.).
- 1954 St. Agnes above Cranshaws, three larvæ on aspens, August 7 ; Nesbit, larvæ on white poplar, September 15 ; Langton Estate, two larvæ on white poplar, September 19 ; Spottiswoode, eight larvæ on poplars, September 25 ; Ellemford, one larva on poplar, October 2 (A. G. L.).
- 1955 Gordon Moss, three at m.v. light, July 1 and August 26 ; Gavinton, five at m.v. light, July 4-29 ; Duns Castle Lake, one at m.v. light, August 28 (A. G. L.).
- 1956 Hirsell, one at m.v. light, June 29 ; Old Cambus Quarry, one, July 15 ; Gordon Moss, July 18 and August 10 ; Gavinton, one, July 28 (A. G. L.) ; Pettico Wick, one, July 28 (E. C. Pelham-Clinton).
- 1957 Gavinton, two at m.v. light, July 8 and 23 (A. G. L.) ; Gordon Moss, a few, July 20 (E. C. Pelham-Clinton).
- 1959 Gavinton, one at m.v. light, August 3 (A. G. L.).

Summary.—Widely distributed throughout the County from the coast to the hills. Emerges about the end of June and flies until end of August. Larvæ from July into October on various species of poplar. This is one of our most beautiful moths ; in size it is sometimes equalled by *gnoma* but *tremula* is distinguished by the narrower grey wedge near the lower outer angle of the forewing.

Harper says it is double brooded in Inverness-shire as in England (*Ent. Record*, Vol. 66, p. 61), but we have no records for May or early June in Berwickshire.

46. *Pheosia gnoma* Fabr. (*dictaeoides* Esp.).

Lesser Swallow Prominent. 102.

- 1925 Widely distributed. Recorded from Byrecleugh and Pease Dean (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 569).
- 1952 Gavinton, one at street lamp, June 24 (A. G. L.).
- 1953 Gavinton, two at street lamps, July 31 and August 2 ; Lees Cleugh, one larva on birch, July 31 ; Bonkyl Wood, one egg on birch, August 3, larva reared (A. G. L.).
- 1954 Gavinton, two at street lamps, May 29 and July 17 ; Kyles Hill, eleven at Tilley lamp, August 1 (A. G. L.). Gordon Moss, several at m.v. light, June 27 (E. C. Pelham-Clinton).
- 1955 Retreat, three at m.v. light, May 23 and July 31 ; Kyles Hill, one, May 29 ; Gavinton, four at m.v. light, May 30, June 6 and 11 ; Spottiswoode, one July 27 ; Bell Wood, a few, July 29 and August 4 ; Gordon Moss, several, July, 1, 18, 21, August 2 and 26 (A. G. L. and E. C. Pelham-Clinton).
- 1956 Hirsell, several at m.v. light, May 8 and 30, June 29, July 24 ; Bell Wood, several, June 23 and July 10 ; Gavinton, July 28 ; Gordon Moss, several, June 23, July 10 and 28 (A. G. L. and E. C. Pelham-Clinton).
- 1959 Gavinton, one at m.v. light, July 23 ; Kyles Hill, two larvæ beaten from birch, August 27 (A. G. L.).

Summary.—A more abundant species than *tremula*, occurring widely wherever birch grows. There are two forms, one with a dark chocolate brown thorax, the other light grey. It has a long staggered emergence from early May to late August, so that ova, full grown larvæ and imagines may all be found at the same time in summer.

47. *Notodonta ziczac* Linn. Pebble Prominent. 103.

- 1875 Duns Castle Sawmill, two or three larvæ on willows (A. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
- 1876 Ayton, Peelwalls, one from pupa (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).

- 1902 Woods, very rare ; larva not so rare (A. Kelly in *Lauder and Lauderdale*, p. 303).
- 1914 St. Abb's Lighthouse, one on July 1 (W. Evans, *Scot. Nat.*, 1914, p. 230).
- 1925 Generally distributed—where burns or bogs are fringed with saughs (*Salix cinerea*) (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 569).
- 1952 Coldingham Moor, one larva, August 21 ; Kyles Hill, six larvæ, August 28 (A. G. L.).
- 1953 Elba, one larva on low sallow, August 14 ; Coldingham Moor, seven larvæ, August 27 (A. G. L.).
- 1954 Gordon Moss, a few at light, June 27 (E. C. Pelham-Clinton) ; two larvæ on sallows, August 4 (A. G. L.) ; Kyles Hill, one imago at Tilley Lamp, August 1 ; Ellemford, a few larvæ on poplars, August 11 (A. G. L.).
- 1955 Gordon Moss, a few at light, June 18 and 24, July 4 and 21 (A. G. L. and E. C. Pelham-Clinton) ; Gavinton, one, July 6 (A. G. L.).
- 1956 Hirsel, three at m.v. light, June 15 and 29 ; Kyles Hill, June 21 and 26 ; Bell Wood, June 23 ; Gordon Moss, July 18 and 21, and August 10 ; Linkum Bay, July 21 ; Burnmouth, August 6 (A. G. L. and E. C. Pelham-Clinton).
- 1957 Gordon Moss, a few at m.v. light, July 20 (E. C. Pelham-Clinton).

Summary.—Widely distributed wherever sallows grow. Emerges from about mid-June and flies until mid-August. Larvæ most common in late August on small sallows.

48. *Notodonta dromedarius* Linn. Iron Prominent. 104.

- 1879 Ayton, bred from larva on alder in Ale-water dean (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
- 1880 Lauderdale (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
- 1895 Gordon Moss (G. Bolam, *H.B.N.C.*, Vol. XV, p. 297).
- 1902 Lauderdale, rare, in woods (A. Kelly in *Lauder and Lauderdale*, p. 303).
- 1911 St. Abb's Lighthouse, one male, July 27 (W. Evans, *Scot. Nat.*, 1914, p. 230).

- 1925 Widely distributed, larvæ on birch and alder, sometimes on hazel. Ayton ; Hule Moss (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 570).
- 1952 Gordon Moss, one last instar larva, September 28 (E. C. Pelham-Clinton).
- 1953 Several larvæ from birch at Kyles Hill ; near Woodheads Farm ; Gordon Moss ; Aller Burn ; Elba ; Lees Cleugh (a few on alder) ; Coldingham Moor ; Longformacus ; Spottiswoode (on willow) ; most in August (*H.B.N.C.*, Vol. XXXIII, p. 140).
- 1954 First reared imago emerged June 4, last on July 19 ; Gavinton, two at m.v. light, July 9 and 13 (A. G. L.) ; Gordon Moss, several, June 27 (E. C. Pelham-Clinton).
- 1955 First imago emerged, May 28 (A. G. L.) ; Gordon Moss, a few, July 18 (E. C. Pelham-Clinton) ; second brood specimens at m.v. light at Gavinton, August 21, and Gordon Moss, August 26 (A. G. L.).
- 1956 First imago emerged, May 30 ; Retreat, a few at m.v. light, June 7 ; Gavinton, June 21 ; Bell Wood, June 23 and July 10 ; Hirsell, June 29 and July 24 ; Nab Dean Pond, July 7 ; Gordon Moss, six, June 21, others, July 18 (A. G. L. and E. C. Pelham-Clinton).
- 1959 Gavinton, at m.v. light, July 16.

Summary.—Widely distributed on both high and low ground where birch and alder grow. It emerges from the end of May until late in July, and in hot summers a partial second brood occurs in late August.

49. *Lophopteryx capucina* Linn.

Coxcomb Prominent. 110.

- 1872 Preston, larvæ on oak on Marygold Hills (J. Anderson, *H.B.N.C.*, Vol. VI, p. 398).
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1877 Threeburnford, two (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
- 1880 Chapel House (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
- 1925 Common. Larvæ on almost any deciduous tree (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 571).

- 1952 Lees Cleugh (Cuddy Wood), a pair *in cop* on a birch trunk, June 2; larvæ common on birch and willow at Langton, Lees Cleugh, Duns Castle, Kyles Hill, Spottiswoode, Longformacus, Gordon Moss, in August (A. G. L.); one last instar larva on birch at Gordon Moss, September 28 (E. C. Pelham-Clinton).
- 1954 Gordon Moss, several at light, June 27 (E. C. Pelham-Clinton).
- 1955 First imago at m.v. light on May 23 at Retreat; last specimen on August 26 at Gavinton—probably second brood (A. G. L.). Gordon Moss, a few at light, July 18 (E. C. Pelham-Clinton).
- 1956 Hirsell, a few at m.v. light, May 30, June 29 and July 24; Gavinton, June 11; Bell Wood, June 23 and July 10; Kyles Hill, June 26 and July 9; Linkum Bay, June 20; Nab Dean Pond, July 7; Gordon Moss, June 4 and 21, and July 18 (A. G. L. and E. C. Pelham-Clinton).
- 1957 Gavinton, July 1.
- 1959 Gavinton, July 17.

Summary.—Common all over the County, especially where birch and willow grow. Usually single brooded emerging from late May to late July, but in hot summers a partial second brood occurs in late August. Imagines vary from a pale buff through rich reddish brown to dark iron-grey.

50. *Odontosia carmelita* Esp. Scarce Prominent. 111.

1925. Rare. One at Foulden Hag, 1898; one bred from a larva got by Mr Haggart near Earlston in 1907 (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 571).
- 1956 Hirsell (Kincham Wood) at m.v. light, one at 10.20 p.m., May 5; two at 9.45 p.m. and 10.15 p.m., May 7; one at 10.5 p.m., and four between 11.45 p.m. and midnight, May 8 (*H.B.N.C.*, Vol. XXXIV, p. 43).

Summary.—Since the introduction of m.v. light for collecting, this species has proved to be more widespread throughout Britain than was formerly supposed. It may, therefore, occur in more localities in Berwickshire than the three

mentioned. So far we have no records for it in glens where *Betula pubescens* grows, though Harper says that it occurs "in well-grown old birch woods, including stunted trees up to 1,500 feet on hillsides" in Inverness-shire (*Ent. Record*, Vol. 66, p. 60). The larva is said to be difficult to obtain, as it usually occurs high up on *Betula verrucosa*—the silver birch.

51. *Pterostoma palpina* Linn. Pale Prominent. 113.

- 1872 Preston, one, June 12 (J. Anderson, *H.B.N.C.*, Vol. VI, p. 398).
- 1875 Broomhouse, netted (A. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
- 1876 Eyemouth, one bred from pupa (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1902 Two captures by Mr Robson and Mr Anderson, not common in Berwickshire (A. Kelly, in *Lauder and Lauderdale*, p. 303).
- 1925 Scarce. Shaw took more than one moth at Eyemouth after 1876 (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 571).
- 1952 Oxendean Pond, one larva on small willow among sedges, August 25 (*H.B.N.C.*, Vol. XXXII, p. 184).
- 1953 Duns Castle Woods, eight larvæ on willows and poplars, July 25 and 30, and August 18; three larvæ at "Darkie's Camp," July 30; Kyles Hill, two larvæ on willows, August 4 and 8 (A. G. L.).
- 1954 Burnhouses, one larva on poplar, others on willow in Duns Castle Woods, August 11 (A. G. L.).
- 1955 Oxendean Pond, one imago at m.v. light, June 4; Gavinton, one, August 21 (second brood) (A. G. L.).
- 1956 Hirsell, one, June 20; Kyles Hill, two, June 26; Linkum Bay, one, June 30 (A. G. L.) Gordon Moss, eleven, June 11, and four, June 21 (E. C. Pelham-Clinton).

Summary.—Probably distributed throughout the County wherever willows and poplars grow; the larvæ are readily found by bending back the branches of the food plant and can be reared in air-tight honey jars. Males come freely to m.v. light. The species emerges during the second half of

May, and flies through June. In hot summers a partial second brood occurs in late August.

52. *Phalera bucephala* Linn. Buff-tip. 114.

- 1902 Lauderdale. Larvæ on many trees (A. Kelly in *Lauder and Lauderdale*, p. 303).
 1925 Spread all over the district (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 572).
 1953 Longformacus, strips, three larvæ beaten from birch, August 11 (*H.B.N.C.*, Vol. XXXIII, p. 87).
 1954 Duns, wings only at Willis Wynd, July 2; Aller Burn, four larvæ beaten from birch, August 14; Gordon Moss, eighteen larvæ beaten from birch, August 12 (A. G. L.); several at m.v. light, June 27 (E. C. Pelham-Clinton).
 1955 Gordon Moss, two, July 4 and 21 (A. G. L.); a few, July 18 (E. C. Pelham-Clinton); Retreat, one, July 21; Gavinton, near Free Kirk, a batch of larvæ on a beech hedge, August 7 (A. G. L.).
 1956 Gordon Moss, five at m.v. light, June 11 and 21 and July 20 (E. C. Pelham-Clinton); Gavinton, two, June 11 and July 6; Bell Wood, four, June 23 and July 10; Chirside Mill, one, June 26; Hirsell, one, June 29; Linkum Bay, one, June 30; Nab Dean Pond, one, July 7 (A. G. L.).
 1957 Gavinton, one at m.v. light, July 2 (A. G. L.).

Summary.—Distributed widely throughout the County from the coast to upland glens, where the larvæ feed chiefly on birch. It emerges during the second half of June and continues throughout July.

53. *Clostera pigra* Hufn. Small Chocolate Tip. 117.

- 1877 Threeburnford, three (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1880 Threepwood Moss (Roxburghshire) and Langmuir Moss (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
 1895 Gordon Moss (G. Bolam, *H.B.N.C.*, Vol. XV, p. 297).
 1902 Edgarhope, on willows, bottom of wood (A. Kelly, *Lauder and Lauderdale*, p. 303).

- 1925 Legerwood, Lauderdale (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 572).
- 1952 Gordon Moss, several larvæ, August 10 (E. C. Pelham-Clinton).
- 1954 Gordon Moss, June 27, a few larvæ, very small, on *Salix repens*; also on September 26, a few larvæ (E. C. Pelham-Clinton); several larvæ obtained on railwayside, August 4, were reared; first imago hatched 30.5.55 (*H.B.N.C.*, Vol. XXXIII, p. 140, A. G. L.).
- 1955 Gordon Moss, a few larvæ, August 7 (E. C. Pelham-Clinton).

Summary.—On mosses and bogs where *Salix repens* grows; somewhat local and restricted in its distribution. The species is most easily obtained by rearing the larvæ, which spin up the topmost leaves of dwarf sallows in August. The moth emerges in June, but is seldom seen on the wing.

Family THYATIRIDAE.

54. *Thyatira batis* Linn. Peach Blossom. 119.

- 1872 Two at Primrose Hill, June 14 and 24 (J. Anderson, *H.B.N.C.*, Vol. VI, p. 398).
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Eyemouth; comes freely to sugar. Banks of the Ale. Two at Ayton (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).
- 1902 Lauderdale. Always local (A. Kelly in *Lauder and Lauderdale*, p. 303).
- 1927 Widely distributed; Ayton, Cockburnspath (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 135).
- 1951 Gordon Moss, a few at sugar (E. C. Pelham-Clinton).
- 1952 Gavinton, one at street lamp, July 8 (*H.B.N.C.*, Vol. XXXII, p. 184).
- 1954 Gavinton, one netted at dusk near Church, July 10; Kyles Hill Road, one at Tilley lamp, August 1 (A. G. L.).
- 1955 Greenlaw Road, near Bent's Corner, one netted at dusk, July 10; Spottiswoode, one at treacle, July 25 (A. G. L.).

- 1956 Hirsell, May 30 and June 29 ; Retreat, June 7 ; Nab Dean Pond, two, July 7. All at m.v. light (A. G. L.).
 1959 Paxton House, one at horse-chestnut bloom, May 26 (S. McNeill).

Summary.—Widely distributed, but never very abundant, from end of May until early August. It flies soon after dusk along hedgerows and comes to light and treacle.

55. *Tethea duplaris* Linn. Lesser Satin. 122.

- 1874 In a Duns garden ; Mr Stevenson, jun. (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
 1874 Whitelaw, near Cockburn Law, by H. Cunningham (J. Ferguson, *H.B.N.C.*, Vol. VII, p. 284).
 1875 Recorded for Duns by A. Kelly in *Scot. Nat.* 1875-6, p. 9.
 1879 Ayton Woods (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1902 Airhouse Wood, local (A. Kelly in *Lauder and Lauderdale*, p. 303).
 1927 Widely distributed, rather scarce ; Eyemouth, Grants-house, Preston (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 136).
 1951 Gordon Moss, June 30, many at sugar and light (E. C. Pelham-Clinton).
 1952 Gordon Moss, one last instar larva, September 28 (E. C. Pelham-Clinton).
 1953 Kyles Hill and Lees Cleugh, larvæ on birch during August and September (A. G. L.).
 1954 Gordon Moss, one at light, June 27 (E. C. Pelham-Clinton) ; Greenlaw Road, above Polwarth, at treacle, July 22 and 24 ; Kyles Hill Road, at Tilley lamp, August 1 (A. G. L.).
 1955 Gordon Moss, many at sugar, July 18 (E. C. Pelham-Clinton) ; abundant at m.v. light, July (A. G. L.).
 1956 Gordon Moss, June 21, July 18 and August 10 (A. G. L. and E. C. Pelham-Clinton) ; Hirsell, two, May 30, others, June 29 ; Kyles Hill, July 9 ; Aiky Wood, on Grants-house Road, August 9 (A. G. L.).
 1959 Longformacus (Rathburne Hotel) at m.v. light, June 25 (C. I. Rutherford).

Summary.—Common and widespread where birches grow. Emerges at the end of May and throughout June and July. Comes to both treacle and light. Larvæ on birch in August ; they make a shelter by spinning leaves together, but can be beaten out.

56. *Achlya flavicornis* Linn. Yellow Horned. 125.

- 1875 One full grown larva on stunted birch on banks of Ale (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482).
 1927 Well distributed ; not uncommon where birch trees are prevalent ; Ayton, Pease Dean, Foulden (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 137).
 1954 Kyles Hill, one imago at rest on a birch trunk in day-time, April 25 ; Bell Wood, two larvæ beaten from birch, August 7 ; Cuddy Wood, one larva beaten from birch, August 15 ; Kyles Hill, one larva found at night on birch, September 5 (*H.B.N.C.*, Vol. XXXIII, p. 139).
 1955 Kyles Hill, about forty at m.v. light, March 30-April 20 ; Oxendean Pond, one, April 9 ; Gordon Moss, several, April 13 (A. G. L.).
 1956 Kyles Hill Road, about eighty at m.v. light, March 25-April 2 ; one imago emerged on March 26, after two winters in the pupa (A. G. L.) ; Gordon Moss, one on a fence post and several at light, April 7 and 14 (E. C. Pelham-Clinton and A. G. L.) ; Hirsell, one female at light, April 9 (A. G. L.).
 1957 Gavinton, one at a street lamp, March 22 (*H.B.N.C.*, Vol. XXXIV, p. 156).

Summary.—A beautiful moth, widely distributed and common among birches. Not easily found by day, but it comes freely to m.v. light. It emerges usually about the last week in March and continues well into April. A variable species ; the pupa may persist through two winters.

Family LYMANTRIIDAE.

57. *Orgyia antiqua* Linn. Common Vapourer. 128.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).

- 1875 Ayton. "This moth must be more common than we suppose, judging from the old webs of the female on the trees, etc." (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
- 1876 Ayton, "A great quantity bred from eggs got in woods" (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
- 1902 Lauderdale. "Somewhere about Hazeldean where it was captured" (A. Kelly in *Lauder and Lauderdale* p. 299).
- 1925 Common, generally distributed though seldom numerous. Larvæ on thorn, birch, meadow sweet, heather, rushes and sedges (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 560).
- 1953 Gordon Moss, one larva beaten from birch along railway side, August 6; it failed to pupate; Lees Cleuch, one male seen flying near junction of Langton Burn and Lees Cleugh Burn, August 28 (*H.B.N.C.*, Vol. XXXIII, p. 87).
- 1954 "One seen flying at Edrom East Bank, July" (Lieut-Col. W. M. Logan Home).

Summary.—Although this is usually regarded as a common species, and sometimes becomes a suburban pest, e.g., in London, the records suggest that it is not very common in Berwickshire, although it would seem to be widely distributed. The apterous female lays her eggs on the old cocoon, which is thereby rendered conspicuous in winter. Records of such cocoons would be welcome.

58. *Dasychira fascelina* Linn. Dark Tussock. 129.

- 1874 Two larvæ on gooseberry bush, Drakemire (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
- 1880 Threepwood Moss (Roxburghshire) and Langmuir Moss (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
- 1895 On all our moorlands on both sides of the Border (G. Bolam, *H.B.N.C.*, Vol. XV, p. 297).
- 1925 Lamberton, Longformacus, Abbey St. Bathans, Duns (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 559).

- 1952 Greenlaw Moor and Abbey St. Bathans, larvæ in May (A. G. L.).
- 1954 Kyles Hill, one larva, April 19; Dirringtons, thirty larvæ, May 15; Kyles Hill, two males at Tilley lamp, August 1 and 3 (A. G. L.).
- 1955 Bushel Hill, three larvæ, May 3; Dirrington, one larva spinning its cocoon, June 15 (A. G. L.).
- 1956 Kyles Hill, one small larva, March 24; Bell Wood, imagines at m.v. light, June 23, and July 10; Kyles Hill, one female, several males at light, June 26 and July 9 (A. G. L.).

Summary.—Widely distributed on heather moors, larvæ aestivate during their first summer and feed up after their second winter, becoming conspicuous objects on the heather in May. Males come freely to light from late June into early August.

* 59. *Dasychira pudibunda* Linn. Pale Tussock. 130.

- 1880 Threepwood Moss (Roxburghshire) and Langmuir Moss (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
- 1925 Shaw had one taken from Greenlaw Moor by D. Anderson, and Renton got it near Fans (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 558).

Summary.—This species is often common in the south of England and extends into the northern counties, but is usually considered absent from Scotland. The larvæ appear in May after hibernation, feeding on oak, hazel, birch and hop. The imagines come well to light, so the species should almost certainly turn up at m.v. lamps if it is still present in the County.

* 60. *Euproctis chrysorrhoea* Hübn. Brown Tail. 131.

- 1875 Ayton Castle (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483). This was at first wrongly identified as *L. salicis* L., but was corrected in 1876 (*H.B.N.C.*, Vol. VIII, p. 127).
- 1925 Not common (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 558).

Summary.—The above is the only record for the County.

Baron de Worms states that this is virtually a maritime species along the south-east and south coasts of England, where the huge colonies of urticating larvæ sometimes do great damage (*London Naturalist* 1953, p. 125).

* 61. *Leucoma salicis* Linn. White Satin. 135.

1877 Eyemouth, one male near a balsam poplar, Eyemouth Mill (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).

1925 Very rare, above is only record (G. Bolam, *H.B.N.C.*, Vol. XXV., p. 558).

Summary.—According to Meyrick this species occurs northwards through Britain up to Ross, but is local and perhaps diminishing. Baron de Worms states that it can be classed as one of London's specialities, the larvæ sometimes occurring in thousands on poplars, and he adds ; " It appears to become much rarer the further it occurs from the Metropolitan Centre." (*London Naturalist*, 1953, p. 125). No doubt this species, like many others, will have benefited from the widespread planting of poplars in both town and country. It is therefore possible that it may re-appear in Berwickshire.

Family LASIOCAMPIDAE.

62. *Trichiura crataegi* Linn. Pale Eggar. 140.

1902 Bleak Lammerlaw (A. Kelly in *Lauder and Lauderdale*, p. 299).

1925 Confined to moors. One larva on 19.4.1896 on Coldingham Moor (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 562).

1955 Kyles Hill, two imagines at m.v. light, July 26 and August 13 ; Bell Wood, three, July 29 and August 4 (A. G. L.).

1956 Kyles Hill, one larva full-grown climbing up a beech tree trunk, July 10 ; two imagines at m.v. light, August 24 and September 8 (A. G. L.).

1958 Kyles Hill, one larva on heather, July 6 ; it spun up on July 12, and produced a female moth, August 30 (A. G. L.).

Summary.—Probably on all our heather moors, but some-

what sparingly. The larva occurs in June and early July and resembles the early stages of the Northern Eggar. The imago emerges in late July and throughout August into September. In Inverness-shire the species has a two year life-cycle similar to the Northern Eggar (G. W. Harper, *Ent. Record*. Vol. 66, p. 61). Richard South stated that the larva usually feeds up and pupates the same year. When the larvæ hibernate, the moths are much darker (*Moths of the British Isles*, Vol. 1, p. 113).

63. *Poecilocampa populi* Linn. December Moth. 141.

- 1873 Taken at Ayton by S. Buglass (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Ayton, at shop windows (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).
 1875 Preston, one fluttering among dead elm leaves (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
 1902 One found at Cleekhimin Bridge (A. Kelly in *Lauder and Lauderdale*, p. 299).
 1913 St. Abb's Lighthouse, 16.11.1913 (W. Evans, in *Scot. Nat.* 1914, p. 230).
 1925 Generally distributed, seldom numerous; Foulden, Whitadder banks, Preston, The Lees, Coldstream, Lauder (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 562).
 1946 Preston, one at a lighted window of the Schoolhouse, November 27 (A. G. L.).
 1952-1954. Common at Gavinton street lamps between October 17 and November 28 (A. G. L.).
 1955 Kyles Hill, both sexes at m.v. light, October 11; Duns, November 28 (A. G. L.).
 1956 Aiky Wood (Duns-Grants house road) at m.v. light, October 16; Gavinton, fourteen at street lamps, November 17; one male, December 8 (A. G. L.).

Summary.—Well distributed and fairly common, especially where there are oak woods. It emerges in the first half of October and continues into December; attracted to m.v. light—especially the males.

* 64. *Eriogaster lanestris* Linn. Small Eggar. 142.

1925 Rare and very local. Renton found larvæ at Gordon Moss in 1881 (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 562).

Summary.—Meyrick says: "Britain to Argyll, formerly common, now more local" (Revised Handbook, p. 465). Baron de Worms states that it occurs in restricted areas in southern England up to North Wales (*London Naturalist*, 1953, p. 127). This species may now be extinct in Berwickshire, as its large nests of larvæ form conspicuous objects in hedgerows in June and would be readily noticed. Bolam recorded it from Newham Bog and other localities in Northumberland. The imago flies in February and March.

65. *Lasiocampa quercus* Linn. Oak Eggar. 143.

1875 Drakemire, fairly common but difficult to catch (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481).

1877 Threburnford, several (R. Renton, *H.B.N.C.*, Vol. VIII, p. 319).

1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).

1925 The var. *callunæ* is generally distributed on moors. The paler race *quercus* was noted by Anderson in the neighbourhood of Duns—larvæ on hawthorn, poplar, and sallows (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 563).

1950 Longformacus, larva on heather, July 2 (A. G. L.).

1952 Greenlaw Moor, larvæ on heather, May 19; Polwarth Strip, larvæ on blaeberry, June 26 (A. G. L.).

1953 Cuddy Wood (Lees Cleugh) one male netted, June 20; six emerged from pupæ, June 26, two, July 1

1955 First imago reared emerged, June 17; a full-grown larva found near Harcarse Hill in July—I failed to rear it (A. G. L.).

1956 Larva at Kyles Hill, June 16 (A. G. L.).

1957 Kyles Hill, a female netted flying in evening during daylight; soon after its capture it laid a few eggs and expired naturally, July 7. Another female was found near Hen Toe Bridge, June 24, also larvæ, proving that both occur in the same year (*H.B.N.C.*, Vol. XXXIV, p. 157).

1958 Kyles Hill, several larvæ on heather, July 6.

Summary.—Common on heather moors, it has a two year life-cycle, but both imagines and full-grown larvæ occur at the same time each year. Harper states that in Inverness-shire the imagines appear more common in odd-numbered years (*Ent. Record*, Vol. 66, p. 61). This is true of Berwickshire also. The imagines emerge from mid-June onwards into July, and the males fly swiftly by day. The larvæ are parasitized by Tachinid flies. It would be of special interest to confirm Anderson's record of the race *quercus* in the Duns district.

66. *Macrothylacia rubi* Linn. Fox. 145.

- 1874 Lauderdale, larvæ abundant, imagines rare (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
- 1875 Drakemire, fairly common, but difficult to catch (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
- 1876 Threburnford, four, difficult to take (R. Renton, *H.B.N.C.*, Vol. VIII, p. 319).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
- 1880 Lauderdale (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
- 1925 Common on moors (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 563).
- 1951 Penmanshiel Moss, several males, June 16 (E. C. Pelham-Clinton).
- 1952 Preston Cleugh and Coldingham Moor—several larvæ, some on low sallow shoots, August 21 (A. G. L.).
- 1953 Greenlaw Moor, larvæ, October 16 and 17 (A. G. L.).
- 1954 Greenlaw Moor, one pupa found, May 18, produced a male moth, June 25; Coldingham Moor, a few larvæ in August, others on Greenlaw Moor in September, and at side of path from Kettleshiel to Dirringtons, September 5.
- 1955 Two reared imagines emerged on June 14; Gordon Moss, one female at m.v. light, June 24.
- 1956 Dogden Moss, one larva, April 1; Hen Toe Bridge, one cocoon found on moor, May 19, produced a female moth, May 27; I took it to Kyles Hill on May 28 and over twenty males assembled between

7 p.m. and 8.30 p.m. (A. G. L.) ; Gordon Moss, two females at light, June 21 (E. C. Pelham-Clinton ; Kyles Hill, three females at m.v. light, June 21 ; Bell Wood, one male came to m.v. light, June 23 (A. G. L.).

1957 Kyles Hill, males flying in evening, May 26 and June 8 (A. G. L.).

1958 Kyles Hill, males flying in evening, May 31 (A. G. L.).

Summary.—An abundant moorland species, emerging during the last week of May and throughout June. Males fly in the evening before sundown, and readily assemble to females. R. Craigs stated that they would assemble to aniseed (*H.B.N.C.* Vol. XXX, p. 147). Females come to m.v. light. The larvæ are difficult to rear in captivity, becoming infected with a fungus. In early spring they sun themselves before spinning their long cocoons on the ground. These cocoons are often pecked open by birds.

* 67. *Philudoria potatoria* Linn. Drinker. 147.

1874 Lauderdale Moors. Larvæ more plentiful than imagines (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).

1902 " Not common, on moors and mosses." (A. Kelly in *Lauder and Lauderdale*, p. 299).

1925 Very local and rare. One got at Duns in 1899 (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 564).

Summary.—Although frequent on the Northumbrian links, this species seems to be very rare in Berwickshire. It occurs up to North Scotland, the larvæ feeding on grasses in marshy areas in May and June after hibernation. According to Bolam, it is widely distributed in Northumberland, both inland and at the coast, but is seldom common.

Family SATURNIIDAE.

68. *Saturnia pavonia* Linn. (*carpini* Schiff).

Emperor. 152.

1843 Near Pease Bridge by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1877 Threeburnford, one, numerous larvæ and pupæ (R. Renton, *H.B.N.C.*, Vol. VIII, p. 319).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
- 1912 St. Abb's Lighthouse, one female, May 6 (W. Evans, *Scot. Nat.* 1914, p. 230).
- 1925 Common on moors (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 564).
- 1951 Kyles Hill, larva, September (A. G. L.).
- 1952 Gavinton, one dead female under a street lamp, April 20; Abbey St. Bathans, one female, May 7 (A. G. L.).
- 1953 Gavinton, a dead female at a street lamp, May 4; Coldingham Moor, twenty-two larvæ on sallows, August 27 (A. G. L.).
- 1954 Gordon Moss, one female on wing in evening, April 28 (E. C. Pelham-Clinton); Jeanie's Muir, one male, May 7; Hen Toe Bridge, a dead female, May 8; Dirrington, several males, May 15; Greenlaw Moor, one female, May 17; Kyles Hill, one male assembled to a reared female, May 23; Coldingham Moor, six larvæ on sallows, August 26 (A. G. L.).
- 1956 Dogden Moss, one male, April 22 (A. G. L.); Gordon Moss, one female on wing in evening, April 28 (6 p.m. B.S.T.) (E. C. Pelham-Clinton); one female at m.v. light, May 2 (A. G. L.); Oxton, one female flew on to a man cycling, May 9; Duns, two live wind-blown females found on streets, both laid eggs, May 13 and 16; Hen Toe Bridge, one worn female, May 19; Kyles Hill, several males flying in evening, May 20 and 22, about 8.15 p.m.; larvæ found July 11 and 31 (A. G. L.).
- 1958 Cumledge Mill, one larva found on garden raspberry, September 1 (R. Hunter).

Summary.—Widespread and fairly common over heather moors, emerging about last week in April and continuing until last week of May. Males fly in sunshine and even on dull evenings, assembling up-wind to females. Latter come to m.v. light.

Family DREPANIDAE.

69. *Drepana falcataria* Linn. Pebble Hook-tip. 156.

- 1873 Duns Castle, one (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
1880 Gordon Moss, (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
1925 Renton got it at Mellerstain, Bolam at Foulden Hag
(G. Bolam, *H.B.N.C.*, Vol. XXV, p. 564).
1952 Gavinton, two at street lamps, May 19 and 24; Cuddy
Wood, three, June 8, 10 and 22 (*H.B.N.C.*, Vol.
XXXII, p. 184).
1953 Oxendean, one imago beaten from birch, June 6; larvæ
from Kyles Hill, Cockburn Law and Cuddy Wood
in August by beating birches (A. G. L.).
1954 First reared imago emerged, May 24 (A. G. L.);
Gordon Moss, a few at light, June 27; one larva,
September 25 (E. C. Pelham-Clinton).
1955 Oxendean Pond, one at m.v. light, June 4 (A. G. L.);
Gordon Moss, a few at light, July 18 (E. C. Pelham-
Clinton): Gavinton, one m.v. light, August 23
(second brood) (A. G. L.).
1956 Hirsell, at m.v. light, June 29 and July 24.
1957 Gavinton, one at light, June 17 (A. G. L.).
1959 Longformacus (Rathburne Hotel) June 25 (C. I.
Rutherford).

Summary.—Widely distributed and fairly common where birches grow. Emerges in second half of May, and flies throughout June into July. In hot summers a partial second brood occurs in August.

70. *Drepana lacertinaria* Linn. Scalloped Hook-tip. 157.

- 1925 Bolam had no records for Berwickshire (*H.B.N.C.*, Vol. XXV, p. 564).
1953 Cuddy Wood, one imago beaten from birch, June 22; Gordon Moss, two larvæ on birch, August 6; Longformacus strips, eleven larvæ, August 11; Cuddy Wood, two larvæ, August 28 (*H.B.N.C.*, Vol. XXXIII, p. 87).
1954 Several reared imagines emerged between May 27 and June 19; Gavinton, one imago at street lamp, July 12; Bell Wood, several larvæ on birch, August 7

- (A. G. L.) ; Gordon Moss, a few at light, June 27 ; one larva, September 25 (E. C. Pelham-Clinton).
- 1955 First reared imago emerged, May 28 ; Gordon Moss, several at m.v. light, June 24, July 4 and 18 ; one larva, August 7 (A. G. L. and E. C. Pelham-Clinton).
- 1956 Bell Wood, at m.v. light, June 23 ; Gordon Moss, several, August 10 (A. G. L.).
- 1957 Gordon Moss, one on wing at dusk, June 8 (E. C. Pelham-Clinton).

Summary.—Widespread and fairly common in birch woods, emerging near the end of May and flying through June into July. A partial second brood may occur in August. Larvæ are readily beaten from birch in August.

71. *Cilix glaucata* Scop. Chinese Character. 158.

- 1874 Broomhouse, beaten from hedge, July 10 (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231).
- 1877 Ayton, one (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322).
- 1902 Lauderdale. Local and rare (A. Kelly, in *Lauder and Lauderdale*, p. 303).
- 1925 John Anderson took it at Preston about 1874. Shaw got it at Eyemouth a few years later (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 566).
- 1953 Gavinton, five at light, June 25, July 3 and 9 (*H.B.N.C.*, Vol. XXXIII, p. 87).
- 1954 Gavinton, three at light, July 9 (A. G. L.).
- 1956 Hirsell, three at m.v. light, June 29 and August 22 ; Linkum Bay, five at m.v. light, June 30 (A. G. L.).
- 1959 Birgham House, two at m.v. light, August 12 and 20 (Grace A. Elliot).

Summary.—Widespread and not uncommon, larvæ feeding on blackthorn and hawthorn. Emerges about the last week in June and flies throughout July ; a partial second brood occurs in late August in good seasons.

Family NOLIDAE.

72. *Celama confusalis* H.S. Least Black-arches. 162.

- 1873 One at Preston (J. Anderson, *H.B.N.C.*, Vol. VII, p. 122).

- 1877 Eyemouth, one, Highlaws Road (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).
 1879 Ayton Castle gardens (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1925 Looked upon as rather rare, though sometimes rather common round Berwick (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 553).
 1955 Oxendean Pond, several at m.v. light, June 4 ; Gavinton, two at m.v. light, June 19 (*H.B.N.C.*, Vol. XXXIII, p. 211).
 1956 Hirsell (Kincham Wood) three at m.v. light, May 12 and 30 (A. G. L.).

Summary.—Probably often overlooked on account of its small size. It emerges in May and continues well into June. I have only taken it at night when it comes freely to m.v. light ; by day it is said to rest on tree trunks head downwards.

Family HYLOPHILIDAE.

73. *Bena prasinana* Linn. Green Silver-lines. 165.

- 1873 Preston (J. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
 1876 Ayton woods, one at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
 1925 Foulden Hag ; probably widely distributed (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 553).
 1952 One wind blown larva under a birch tree above Elba on Cockburn Law side of Whitadder, August 29 (*H.B.N.C.*, Vol. XXXII, p. 184).
 1955 One emerged from a cocoon found in previous October among dead oak leaves at Kyles Hill, May 28 (A. G. L.) ; one larva beaten from oak, near Drake-mire, August 28 (E. C. Pelham-Clinton).
 1956 Kyles Hill, two at m.v. light, just before dawn, June 21 and 26 (A. G. L.) ; Paxton, one at rest on Woodrush, July 3 (S. McNeill).
 1959 Gavinton, one larva on beech, August 25 (A. G. L.).

Summary.—Widely distributed, inhabits birch and oak woods. Emerges about the end of May and continues through June into July ; comes to light and treacle. The moth is

said to make a peculiar stridulatory noise when flying (E. Meyrick, *Revised Handbook*, p. 50). If beaten out of foliage, it spins round with wings open on one side only.

74. *Sarothripus revayana* Scop. (*undulana* Hübn.).

Large Marbled Tortrix. 167.

1927 Bolam had no Berwickshire record (*H.B.N.C.*, Vol. XXVI, p. 194).

1954 Gavinton, one at street lamp near Church, October 3 (*H.B.N.C.*, Vol. XXXIII, p. 141, A. G. L.).

Summary.—Possibly overlooked because of its small size. It frequents oak woods and hibernates. Baron de Worms states that it can often be beaten from thick foliage, such as yew, in mid-winter.

Family ARCTIIDAE.

75. *Spilosoma lubricipeda* Linn. (*menthastri* Esp.).

White Ermine. 168.

1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).

1911 St. Abb's Lighthouse, May 25 (W. Evans, *Scot. Nat.* 1914, p. 229).

1925 Widely distributed, generally abundant, but rather local; Eyemouth, Earlston (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 558).

1951 Gordon Moss, a few at light, June 30 (E. C. Pelham-Clinton).

1952 One emerged from pupa, April 24 (A. G. L.); Gordon Moss, April 26 and June 14 (E. C. Pelham-Clinton); Gavinton, abundant at street lamps, May 8-July 8 (A. G. L.).

1953 Gavinton street lamps, May 4-August 3 (A. G. L.).

1954 Gavinton, first specimen, May 21 (A. G. L.). Gordon Moss, a few at light, June 27 (E. C. Pelham-Clinton).

1955 Gavinton, a newly emerged specimen, May 15 (A. G. L.).

1956 Gavinton, first specimen, May 22 (A. G. L.). Gordon Moss, twenty-five at light, June 11 and 21 (E. C. Pelham-Clinton). Other localities, Allanton, Hirsell,

Retreat, Broomhouse, Kyles Hill, Bell Wood, Nab Dean, Old Cambus Quarry (A. G. L.).

Summary.—Widely distributed, often abundant, the larva being one of our best known “hairy oobits.” The moth emerges usually in early May and continues into July or early August. When chased by bats, it dives to earth and goes into a cataleptic fit.

* 76. *Spilosoma lutea* Hüfn. Buff Ermine. 170.

1925 Only one record—a single specimen at Peelwalls more than fifty years ago. Nevertheless it abounds in gardens at Berwick (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 557).

Summary.—It is strange that this species appears to be absent from the County. Its presence at Berwick would lead one to expect it to occur along the Tweed valley.

* 77. *Diacrisia sannio* Linn (*russula* Linn).

Clouded Buff. 172.

1877 Threburnford, two; flies in sunshine (R. Renton, *H.B.N.C.*, Vol. VIII, p. 318).

1897 Gordon Moss; seems very rare (W. Shaw, *H.B.N.C.*, Vol. XVI, p. 231).

1925 Widely distributed, nowhere common; Coldingham Moor, Earlston, Lauderdale (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 556).

Summary.—Apparently rare in the County. According to Baron de Worms it is “a most striking species, as the males in June career over most heathland up to north Scotland. They will also come to the sugar patch” (*London Naturalist* 1953, p. 135). The larvæ feed on many low herbaceous plants and on *Erica*; after hibernation they feed up in April and May. R. Craigs found it plentiful in upper Redesdale (Northumberland) in 1934 (*H.B.N.C.*, Vol. XXX, p. 147).

78. *Phragmatobia fuliginosa* Linn. Ruby Tiger. 173.
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Preston, one caught flying, May 30 ; also one from larva (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231).
- 1877 Threeburnford, three (R. Renton, *H.B.N.C.*, Vol. VIII, p. 319).
- 1880 Threepwood Moss (Roxburghshire) and Langmuir Moss (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
- 1925 Generally distributed, larvæ feed on heather as well as on more lowly plants. Shaw found them eating laurel ! (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 557).
- 1945 Ladykirk, June 5 (A. G. L.).
- 1952 Watch Water, May 20 ; Gavinton, one at street lamp, July 1 (A. G. L.).
- 1953 Duns Castle Lake, larva, September 28 ; Lees Cleugh, larva, October 11 (A. G. L.).
- 1954 Dirringtons and Greenlaw Moor, cocoons on heather, May 15 ; Kyles Hill, larva, September 29 ; Ellemford, eight larvæ, October 2 (A. G. L.).
- 1955 One cocoon on moor opposite Bell Wood, Cranshaws, May 14 ; first imago reared emerged, May 26 (A. G. L.).
- 1956 Kyles Hill, larva, March 3 ; Elba, two larvæ, March 11, they spun up within a week ; Kyles Hill, one female caught flying by day over heather, May 20 ; an imago emerged from cocoon, May 31 ; Preston Cleugh, three empty cocoons, June 3 (A. G. L.). Gordon Moss, three in light trap, June 11 (E. C. Pelham-Clinton).
- 1957 Hardens Hill, one female, May 8 (A. G. L.).
- 1958 Elba, one imago, June 8 (A. G. L.).
- 1959 Marden, one flying by day, May 10 (A. G. L.).

Summary.—Occurs all over the County on both high and low ground, and flies both by day and night. Larvæ hibernate and emerge in early spring to sun themselves before spinning their cocoons ; occasionally parasitized by Tachinid flies. Imagines emerge about mid-May and continue through June

into July. Larvæ feed on many herbaceous plants as well as on heather. Moths from the latter tend to be smaller and darker.

79. *Parasemia plantaginis* Linn. Wood Tiger. 175.

- 1873 Edgarhope Wood and Dogden Moss (A. Kelly, *H.B.N.C.* Vol. VII, p. 122).
 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1876 Ayton, one in village (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
 1877 Threeburnford (R. Renton, *H.B.N.C.*, Vol. VIII, p. 318).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
 1880 Threepwood Moss (Roxburghshire) and Langmuir Moss (A. Kelly, *H.B.N.C.*, Vol. IX, p. 384).
 1902 Found all over the Lammermuirs (A. Kelly, in *Lauder and Lauderdale*, p. 298).
 1925 Well distributed, fairly common, Coldingham Moor, Lauderdale, Abbey St. Bathans, Duns (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 556).
 1947 Fast Castle (W. M. Logan Home, *H.B.N.C.*, Vol. XXXI, p. 51).
 1954 One larva found on road between Retreat and Elba, May 8, produced a female moth, June 26; Hule Moss, one male in heather, June 20 (A. G. L.).
 1958 Moor behind Kyles Hill, one male netted, July 6 (A. G. L.).

Summary.—Widely distributed, but never very common; probably on most moors and also on heathy ground bordering moors. Larvæ hibernate and feed up in April and May. Moths emerge about the last week of June and continue into July. Males fly rapidly in sunshine, occasionally settling in the heather.

80. *Arctia caja* Linn. Garden Tiger. 176.

- 1877 Threeburnford, two. More plentiful in 1876 (R. Renton, *H.B.N.C.*, Vol. VIII, p. 319).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).

- 1925 Common in cultivated areas, scarcer amongst the hills (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 556).
- 1945 Larvæ seen on roadside near Chirnside, June 2 (A. G. L.).
- 1948 St. Abbs, July 17 (W. B. R. Laidlaw, *H.B.N.C.*, Vol. XXXI, p. 247).
- 1948 Cleugh Cottage, one imago, July (A. G. L.).
- 1952 Larvæ at Bogend, May 8, and Abbey St. Bathans, June 4; imagines emerged, June 23 and 25. Ova obtained from a female found in Duns during July hatched, August 6 (A. G. L.).
- 1953 Printonan, July 6; Gavinton, at a street lamp, July 12 (A. G. L.).
- 1954 Wedderburn, one larva, June 14, female moth emerged, July 19; four imagines at Duns Town Hall during Reiver's Week; Gavinton, one at light, August 24 (A. G. L.).
- 1955 Grantshouse, a pair, July 7 (A. G. L.).
- 1956 Ayton, four young larvæ, April 17; Burnmouth, two larvæ, May 13; Bell Wood, imago at m.v. light, June 23; Linkum Bay, at m.v. light, June 30; Old Cambus Quarry, six at m.v. light just before dawn, July 15; Hirsell, one at m.v. light, July 24; Burnmouth, several at m.v. light, (fifteen in one trap), August 2 and 6 (A. G. L.); Pettico Wick, one at light, July 28 (E. C. Pelham-Clinton).
- 1957 Chirnside, one larva, June 21; Abbey St. Bathans, a pair, July 4; the female laid over 700 eggs which started hatching, July 20 (*H.B.N.C.*, Vol. XXXIV, p. 157).
- 1959 Gavinton, several at m.v. light, first date, July 11 (A. G. L.).

Summary.—Widespread from the coast to the hills and all over the Merse; probably most abundant at the coast, where larvæ occur commonly on the braes in spring after hibernation. The imagines usually begin to emerge about the last week in June, and fly throughout July into August. They come to m.v. light and have a marked flight just before dawn.

* 81. *Panaxia dominula* Linn. Scarlet Tiger. 179.

- 1925 Old Cambus—where Hardy took it in the 1870's
(G. Bolam, *H.B.N.C.*, Vol. XXV, p. 556).

Summary.—This is a South of England species only occurring as far north as Lancashire, according to Meyrick. Its occurrence in Berwickshire last century is something of a mystery.

* 82. *Callimorpha jacobaeae* Linn. Cinnabar. 183.

- 1873 Leader Vale at Thirlestane Castle (A. Kelly, *H.B.N.C.*,
Vol. VII, p. 122).
1877 Ayton woods, one (S. Buglass, *H.B.N.C.*, Vol. VIII,
p. 321).
1925 Rare inland (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 555).

Summary.—Although this species is common on the Northumbrian and East Lothian coasts, the records show that it is rare in Berwickshire notwithstanding the abundance of its food plant—Ragwort. The larvæ occur in April and early May, and the imagines start emerging in the latter half of May and continue through June.

83. *Nudaria mundana* Linn. Muslin Footman. 185.

- 1873 Preston, apparently common (J. Anderson, *H.B.N.C.*,
Vol. VII, p. 122).
1873 Eyemouth, (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
1874 Preston, common in July (J. Anderson, *H.B.N.C.*,
Vol. VII, p. 231).
1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
1902 Lauderdale, fairly common—Woodheads Quarry (A.
Kelly, in *Lauder and Lauderdale*, p. 298).
1925 Well distributed and usually abundant, occurs on sea
cliffs (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 553).
1952 Newtown Street, Duns, one, July 7 (A. G. L.).
1953 Gavinton, at street lamps, July 12 (A. G. L.).
1955 Gavinton, at m.v. trap, July 20 (A. G. L.) ; Gordon
Moss, a few at light, July, 28 (E. C. Pelham-Clinton).

- 1956 Gordon Moss, one larva beneath stone on top of wall (D. A. B. Macnicol); imagines at light, July 18 (A. G. L.); Hirsell, at light, July 24; Gavinton, at light, July 27 (A. G. L.); Aller Burn, a few on wing, 7.40 p.m., B.S.T., August 19 (E. C. Pelham-Clinton).
- 1957 Gordon Moss, a few larvæ under stones on wall, April 28; St. Abb's Head, several larvæ on dry stone dykes (H.B.N.C., Vol. XXXIV, p. 156).

Summary.—Widely distributed through the County, and generally common. Larvæ in April and May feeding on lichens on walls. Imagines occur July-August and come to light.

84. *Setina irrorella* Linn. Dew Footman.

- 1873 Eyemouth, local (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1877 Eyemouth, on sea banks, not uncommon (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).
- 1894 Larvæ abundant on rocks on the coast near Eyemouth, September (W. Evans, *Scot. Nat.* 1897, p. 94).
- 1925 Confined to coast—Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 554).
- 1950 Eyemouth, on coast cliffs, June 14 (W. B. R. Laidlaw, *H.B.N.C.*, Vol. XXXII, p. 60).
- 1955 One reared imago emerged July 8, larva from Eyemouth (A. G. L.).
- 1956 Burnmouth, larvæ near the Gull Rock, March 27 (I. Patterson); first imago reared emerged, May 21. Fancove Head, one female on grass, July 27 (A. G. L.).
- 1959 Burnmouth, one imago, June 6 (A. G. L.).

Summary.—Larvæ often abundant on rocks and grassy braes on the coast. They feed on the yellow lichen *Xanthoria parietina*, and probably on other species, in autumn and spring. Moths emerge from last week in May and continue into late July.

* 85. *Cybosia mesomella* Linn.

Four-dotted Footman. 189.

- 1873 Ayton, near tanpit, by T. Renton (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
1875 Ayton, a fine male (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
1902 "This is a far off capture. Little acquaintance with this moth" (A. Kelly, in *Lauder and Lauderdale*, p. 298).
1925 Buglass took three more at Ayton (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 555).

Summary.—We have no recent records of this moth in the County. It occurs on heathland and in open woods and mosses, where the larvæ feed on lichens growing on heather in April and May after hibernation. Richard South stated that it occurs in the Clyde, Solway, Moray and Aberdeen areas; "the moth, in June, may be disturbed from bushes or put up from the heather." It is quite possible that it may still be present in Berwickshire.

ORNITHOLOGICAL AND OTHER NOTES.

ORNITHOLOGY and ZOOLOGY.

Records by F. BRADY, M.Sc., W. R. CAIRNS, S. CLARKE, A. COWIESON, Lieut.-Colonel W. M. LOGAN HOME, M.B.O.U., A. G. LONG, M.Sc., F.R.E.S., S. McNEILL, and W. MURRAY.

(1) From F. Brady, M.Sc.

Goldeneye. About 120, the usual number in the wintering flock on the Tweed from Berwick to Union Bridge, 21.3.59.

Grey Lag Goose. Fifteen flew over Berwick westwards, 1.11.59.

Waxwing. Several along New Road at Berwick, 8.11.59.

Cheviot Goats. Seven adults and three black and white kids on Harelaw, 3.4.59.

(2) From W. R. Cairns.

Chiffchaff. One at Spottiswoode, 1.10.59, and for about a week later.

Water Rail. One at Dod Mill during last three weeks of December, 1959.

(3) From S. Clarke, A. Cowieson, Lieut.-Colonel W. M. Logan Home, M.B.O.U., and W. Murray.

Waxwing. Seven at Stony Muir, 1.2.59, and 14, 2.2.59. A large number (at least 53) were recorded 21.11.59 from eight localities.

Goosander. Several pairs flew past Cumledge, 19.3.59 and later.

Gadwall. One male at Hule Moss, 29.3.59.

Little Owl. Two nesting pairs near Lintlaw, reared three young each.

Sand Martins. About 300 occupied nests counted near Broomhouse; all had successful first broods, about 80% reared second broods, and about 50% had third broods. About 1,000 birds estimated present at end of season.

Pied Flycatcher. Four males seen at Lees Cleugh, four at Abbey St. Bathans, seven at Cumledge, but only two females seen at each locality.

Yellow Wagtail (ssp. *flavissima*). One at Watch Reservoir, 29.8.59.

Siskin. Six near Longformacus, 29.8.59.

Crossbill. Last record for season, two at Oxendean Pond, 30.8.59.

Hawfinch. One found dead in Manderston Estate, 26.10.59.

Water Rail. One at Bell's Burn, Manderston, 11.11.59; four at Duns Castle Lake, 6.12.59.

Green Sandpiper. A few at Bell's Burn, between 22.9.59 and 20.12.59; two at sewage field, Duns, 30.1.59, and one, 6.12.59.

Lapland Bunting. Six seen at Lousies Wood, Manderston, 8.11.59.

Ringed Plover. One at Watch Reservoir, 30.8.59.

Great Grey Shrike. One at Mire Loch, St. Abbs, 10.10.59 (R. McBeath).

Birds seen at Hule Moss in Autumn 1959.

Green Sandpiper. Six between August 9 and September 1.

Spotted Redshank. One between August 22 and September 1.

Dunlin. Several, August 2-October 11.

Knot. A few, August 22-26.

Grey Plover. One, September 20.

Curlew. Several, August 9-September 26 (when 30 were present).

Whimbrel. Four, August 22.

Ruff. One, August 2.

Black Tailed Godwit. One, August 22 and September 6.

Water Rail. One, November 7.

Merlin. One, September 26.

Peregrine. One, August 6 and August 9.

Garganey. One, from August 15-September 6.

Scaup. One, October 31.

Goldeneye. Earliest record, August 11.

Long-tailed Duck. One between October 31 and November 7.

Whooper Swan. Eight, October 31.

Barnacle Goose. Two, October 31.

Brent Goose. Six, November 1.

Bean Goose. Forty-three, November 7.

Little Auk. One, October 31.

Wheatear. Last migrant recorded, September 26.

Tree Pipit. One, September 17.

Grasshopper Warbler. One, August 22.

Goldcrest. One, October 11.

(4) From A. G. Long, M.Sc., F.R.E.S.

Bullfinch. A pair came into a garden at Gavinton several times and were observed feeding on larvæ of the Magpie moth (*Abraxas grossulariata*) on gooseberry bushes, 8.5.59.

Crossbill. Four juveniles at Kyles Hill, 5.6.59 (seen by A. Cowieson and W. Murray).

Green Sandpiper. Five on Whitadder below Edington Mill, 28.7.59.

Magpie. One at top of Stotten Cleugh (East Lothian), 15.8.59.

Short Eared Owl. One in daytime near Hen Toe Bridge, 18.8.59.

(5) From A. M. Porteous.

Grasshopper Warbler. A pair at Bogend in May.

Stonechat. One male at Hirsell, 9.10.59.

(6) From S. McNeill.

Little Gull. One at Berwick, 23.8.59.

Green Sandpiper. Six, and *Grasshopper Warbler* at Canty's Bridge, 28.8.59.

Red Necked Grebe. One at Berwick, 12.9.59.

Waxwing. Two at Paxton, 5.11.59.

ENTOMOLOGY

Observations during 1959 by GRACE A. ELLIOT, A. G. LONG, and
S. McNEILL.

Name.	Date.	Place.	Remarks.
Spring Usher (<i>E. leucophaearia</i>)	4.3.59	Bridge-end, Duns.	One on a wall, near a street lamp.
Scotch Brown Argus (<i>A. artaxerxes</i>).	6.6.59 and 13.6.59	Burnmouth	Several on sea braes.
Mother Shipton (<i>E. mi</i>).	14.6.59	Winfield	One female netted by day (S. McN.).
Single-dotted Wave (<i>S. dimidiata</i>).	6.7.59	Birgham	One at light (G. A. E.).
Rush Veneer (<i>N. noctuella</i>)	15.7.59 to 7.10.59	Gavinton and Birgham	A migrant ; abundant in autumn (G. A. E., A. G. L.).
Barred Rivulet (<i>P. bifaciata</i>)	24.7.59	Gavinton	One in m.v. trap. <i>First Berwickshire record.</i>
Bulrush (<i>N. typhae</i>)	12.8.59 12.8.59	Birgham Paxton	One in m.v. trap (G. A. E.). One reared (S. McN.).
Butterbur (<i>H. petasitis</i>)	12.8.59 20.8.59	Gavinton Birgham	One in m.v. trap (A. G. L.). Two in m.v. trap (G. A. E.).
Centre-barred Sallow (<i>A. xerampelina</i>)	26.8.59	Birgham	A few at m.v. trap (G. A. E.).
Deep Brown Dart (<i>A. lutulenta</i>)	26.8.59 2.9.59	Birgham	Two at m.v. trap (G. A. E.).
Golden-rod Brindle (<i>L. solidaginis</i>)	27.8.59	Kyles Hill	One on a pine trunk, 2 feet above the ground.
Speckled Wood (<i>P. aegeria</i>)	24.8.59 6.9.59	Clarabad Mill Clarabad Mill	One seen. One caught, another seen ; on mint flow- ers (S. McN.).
Orange Sallow (<i>T. citrigo</i>)	20.8.59	Paxton	One (S. McN.).

Name.	Date.	Place.	Remarks.
Black Rustic (<i>A. nigra</i>)	10.9.59	Birgham	One in m.v. trap (G. A. E.).
Red-line Quaker (<i>A. lota</i>)	13.9.59	Birgham	One in m.v. trap (G. A. E.).
Large Wainscot (<i>R. lutosa</i>)	25.9.59 to 11.10.59	Birgham Duns Gavinton	Five in m.v. trap (G. A. E.). One at street lamp (S. McN.). Two (A. G. L.).
Brindled Ochre (<i>D. templi</i>)	29.9.59 to 4.10.59	Birgham Duns Gavinton	Two (G. A. E.). One (S. McN.). Two (A. G. L.).
Mallow (<i>L. clavaria</i>)	3.10.59	Gavinton	One in m.v. trap.
Small Mottled Willow (<i>L. exigua</i>)	3.10.59	Birgham	One in m.v. trap ; a very rare migrant, first Berwickshire record (G. A. E.).

The Red Admiral (*V. atalanta*) appeared in Berwickshire during early July, and the second brood was very abundant in September-October.

A Humming Bird Hawk moth (*M. stellatarum*) was taken at Preston on July 14, and the Silver Y (*P. gamma*) was abundant in autumn flying until about mid-October. A single larva of the Death's Head Hawk (*A. atropos*) was found on potato plants on September 15 in a field between Chirnside and Allanton ; this suggests an immigration in early July.

BOTANY.

Observations during 1959 by A. G. LONG and I. McWHAN.

Aremonia agrimonioides. Was discovered on railway line near Grueldykes by G. Grahame some years ago ; also in wood near Duns refuse tip. A specimen found by a pupil was brought from Earlston.

Agrostis gigantea. Duns railway station. Det. F. H. Perring, Cambridge.

Atriplex laciniata. Skateraw, East Lothian ; Berwick-upon-Tweed.

Arctium vulgare. This is the common form of Burdock, near Duns. Det. Dr Sledge, Leeds University.

Alchemilla xanthochlora. This is the commonest form of Lady's Mantle in Berwickshire. Det. F. H. Perring.

Alchemilla glabra. Stottencleugh. Det. F. H. Perring.

Allium scorodoprasadum. Under Berwick Castle, 1957. Det. P. Green, Royal Botanic Gardens, Edinburgh.

Ballota nigra. Below Berwick Castle.

Brachypodium sylvaticum. Crooked Burn, Foulden Newton.

Bromus lepidus. Cheeklaw Farm, Duns.

Carex flacca. Raecleughhead, Duns.

Carex otrubæ. Skateraw, East Lothian.

Chenopodium polyspermum. Duns railway line.

Chaenorrhinum minus. Duns railway line.

Callitriche platycarpa. Near Hule Moss, Greenlaw.

Callitriche stagnalis. The common form in Berwickshire, Det. P. Green.

Campanula latifolia. Nisbet Rhodes, Duns.

Cuscuta campestris Yunker. A Dodder found by Mr J. Robertson on leeks at Coldingham was provisionally identified by Dr S. M. Walters as this species, which is of American origin.

Calystegia sepium. Both ssp. *sylvatica* and ssp. *sepium* were found on the Duns railway line.

Cardamine amara. On the Whitadder at Marden.

Desmazeria marina. Lifeboat House, Eyemouth. Det. P. Green.

Epilobium montanum var. *verticillatum* ("found occasionally in our district," according to Dr. Johnston, 1853), Duns railway line.

Epilobium obscurum. Most of the square-stemmed Willow-herbs found near Duns belong to this species. Det. F. H. Perring.

Euphrasia brevipila. All the Eyebrights found in Berwickshire this year belonged to this species. Det. F. H. Perring.

Epilobium pedunculare. This New Zealand Willow-herb was first found in Berwickshire along the River Dye above Longformacus by Dr Davies of Edinburgh University. In 1958 it was found by Miss H. Brown on a little scaur of old red sandstone near the Dye at Longformacus. In 1959 it was found on shingle by the Whitadder above Broomhouse; on the Berwick Burn near Oldhamstocks (below the bridge), and, abundantly, on shingle at Stottencleugh (East Lothian).

Epipactis dunensis. This very rare orchid, hitherto known only from Lancashire and Anglesey, was discovered on Holy Island by Mr Arthur Smith of Selkirk.

Gnaphalium sylvaticum. Kyles Hill.

Gnaphalium uliginosum. Hule Moss and Watch Reservoir (S. Clark).

Galeopsis bifida. Raecleughhead, Duns.

Galeopsis tetrahit. Marden, Chirnside.

Glaucium flavum. Cockburnspath (Arthur Smith).

Juncus bulbosus. Watch Reservoir (W. Murray). Det. F. H. Perring.

Helictotrichon pratense. St. Abbs (Mr Henderson).

Lotus tenuis. Above Duns Reservoir, near Hardens.

Lysimachia nummularia. Greenlaw Road, near Bent's Corner.

Nonnea pulla D.C. Cheeklaw, 1958. Det. S. M. Walters.

Odontites verna ssp. *serotina*. Near railway line, Duns.

Primula veris x *vulgaris*. Coldingham (Mr Henderson).

Polygonum amphibium. Whitadder above Hutton Bridge; New Water Haugh, near Berwick.

Polygonum baldschuanicum. Burnmouth, at top of steep brae. Det. F. H. Perring.

Psamma baltica. Ross Links (Arthur Smith).

Ranunculus lutarius. Duns Reservoir.

Ranunculus aquatilis ssp. *heterophyllus*. Near Hule Moss.

Silene noctiflora. Near Cheeklaw, Duns (1958); near Horsebog, Birgham.

Sagina nodosa. Near Hule Moss.

Scrophularia umbrosa. Reedy Lock. Det. F. H. Perring.

Symphytum x *uplandicum*. Most of our larger Comfrees are of this type. Det. P. Green. *S. officinale* has not been found.

Symphytum tuberosum. Marden. This is our commonest Comfrey.

Sedum roseum. Dulaw Dene.

Stellaria nemorum. Marden; Oxendean Pond.

Stellaria alsine. Very common.

Scirpus maritimus. Near New Water Haugh, Berwick.

Spergularia media. Salt Marshes at Berwick.

Scabiosa columbaria. Below Berwick Castle (1957).

Triglochin maritima. Salt marshes at Berwick; also at Linkim Bay.

Ulex gallii. Hardens Hill, near radar pylon. Conf. F. H. Perring, "near the limit of its range."

Verbascum thapsus. Near bowling green, Duns; a garden weed at Gavinton.

Levisticum officinale. A roadside casual, near Langton Bridge (1957). Det. P. Green.

REPORT ON MEETING OF BRITISH ASSOCIATION AT YORK, 1959.

By Mrs. M. H. McWHIR.

The 121st meeting of the Association was held in the beautiful and historic City of York. Its inaugural meeting was held here in 1831, with an attendance of 300 members.

York lies almost midway between Edinburgh and London. Its roots are deep in the past. In ancient times the Romans realised its defensive advantages, lying as it does, between two rivers. The walls that encircle the City as we see it to-day are between two and three miles long.

Its mediaeval streets are unique, and as one moves along them, the centuries roll back. Their names are a great and abiding source of interest. Shambles (Butchers') Street is the oldest and is but little changed. Another street name, Whip-ma-Whop-ma-Gate, recalls the days of felons in receipt of their just or unjust punishment.

In the Museum one could wander for days and yet not see half its treasures, so lovingly cared for.

The Minster, of course, is the glory of the City, and dominates its centre. It is famous the world over for its dignity, grandeur and fair proportions, the richness of its decorations, interior and exterior, and its wonderful heritage of old glass, which shines from over a hundred windows.

The Presidential Address opened proceedings and was delivered in the Rialto Cinema. Among the platform party was Her Royal Highness The Princess Royal, in her academic robes as Chancellor of Leeds University.

In past addresses each President has considered a theme of peculiar interest to scientists. For example, science daily becomes more complex and bewildering to the ordinary person. So at Liverpool, Sir Edward Appleton pleaded with its exponents to make themselves intelligible to the layman; without an informed people, he made it clear that science

could never hope to flourish. At Dublin, Professor Blackett was concerned in applying it on a world-wide front, to solve the problems of poverty and distribution.

This year's President, Sir James Gray, invited scientists everywhere to pay the closest attention to moral principles and the social results of their discoveries. Looking at science as a whole, Sir James supported his arguments by evidence drawn from a number of the sections which go to make up the British Association. He emphasised the vital need of considering the good effects of science on international relationships, and stressed strongly the duty of lecturers to throw light on its beauty, its inflexible pursuit of truth, its challenge to courage and its power of inspiration. He went on to say that, like music, science now knows no barriers and that the combined effort of scientists throughout the world is essential if man is to continue in his attempts to unravel the secrets of nature. Science, he suggested, should be taught to children, and the whole problem tackled in the schools. At the General Committee Meeting which, as your delegate, I am privileged to attend, it was arranged that the annual gathering should be supplemented by continuous nation-wide meetings for juniors throughout the big cities.

At this meeting Sir James mentioned that the Association had now more than 300 leading scientists who were prepared to lecture in different areas all over the country, and that, last year, lectures were delivered to audiences totalling 30,000. Ten area committees and branches had been formed and others would follow.

Attendance at the Annual Meeting this year almost touched 3,000; a record, we were told, for a non-university town. Sir George Thomson, Master of Corpus Christi College, Cambridge, was unanimously elected President of the Association for 1960. He is a Nobel Prize winner in Physics, and played a leading part in Britain's early investigations as to the possibility of producing an atomic bomb.

One outstandingly interesting lecture I attended was given by the President of Section "H," Professor Ian Richmond, C.B.E., Professor of Archaeology at Oxford University. It was entitled "The Nature and Scope of Archaeology." In the Agricultural Section, Dr H. G. Sanders, Chief Scientific

Adviser on Agriculture to the Ministry of Food and Fisheries, said that although this country is now producing more than ever before, science, in case of necessity, could easily raise the level far higher.

The modern predicament, "How can the individual aspire to intelligent citizenship in this scientific age?", was put before us by the Countess of Albemarle in her Presidential Address to the Conference of Affiliated Societies. Lady Albemarle remarked that we needed to be aware of some of the forces at play, to recognize that the brave new world demanded from us a subtleness of outlook unparalleled in history.

In the Dental Section, Dr R. L. Hakles stated that the incidence of dental decay had gone up six times since Anglo-Saxon days. He thought that the School Meal Service could do something to help by providing an apple after meals.

As usual during this non-stop week, there were many excursions to places of outstanding interest. A tour of York and its buildings included the Multiangular Tower, erected in 300 A.D., and King's Manor House, originally the residence of the Abbot of St. Mary's. We walked round the city walls from Bootham to Monk's Bar, and visited St. William's College, founded for chantry priests of York Minster, and later used by Charles I for his Printing Press; also Holy Trinity Church, Goodramgate, with its box pews and superb east window, and the magnificent 14th century Merchant Adventurers' Hall, one of the finest of the city's mediaeval Guildhalls.

As a member of the General Committee, I was privileged to be one of the guests invited to an evening party at Castle Howard. We were most hospitably received by Mr George and Lady Cecilia Howard, and moved at leisure through this tremendous building, admiring the treasures spread out before us. The beauties of the chapel were enhanced by the light playing on the coloured glass. Music sounded softly and continuously from the organ.

A visit to Rowntree's Factory was of great interest, the hygienic handling of the chocolate being most impressive.

Another day we sailed down the Ouse to Bishopthorp, the residence of the Archbishop of York, and charmingly

situated on the right bank. Part of the Palace is early 13th century, in lancet Gothic style. A splendid view is obtainable from the windows, with the winding river in the foreground, and, away on the horizon, the Yorkshire hills and dales.

As there are no lectures on a Saturday, an all-day excursion to the Brontë country had been arranged. High on the Pennine Range lies the lonely village of Haworth. To this wild and rugged retreat came the Brontë family in 1820. The history of these most gifted individuals must be one of the strangest and most tragic outside fiction. The parsonage is early Georgian, facing east, to a view of grim expanses of wild moorland, where in winter howling winds blow continuously. Its rooms project a ghostly atmosphere, and this is increased by the show cases containing family relics. The walls are hung with numerous examples of Charlotte's work as an artist. All four children predeceased their eccentric father, and a tablet in the little church records their premature departures. One verse of Emily's poem, "A little while, a little while," describes the physical setting :—

" A little and a lone, green lane
That opened on a common wide ;
A distant, dreamy, dim, blue chain
Of mountains circling every side."

" The Conflict and the Bond between Religion and Science " was the subject of the sermon on the Sunday, by the Archbishop of York, Dr. A. M. Ramsey. After welcoming the Association to the Minster, he declared that there had certainly been times in history when the bond between the sciences and the worship of God was not apparent. It was, he felt, the task of the theologian to explore divine revelation.

The final meeting of the General Committee brought this most memorable Conference to an end. Sincere thanks were recorded to the Mayor and Corporation, and to York's kindly and hospitable citizens. The Meeting in 1960 is to be held at Cardiff.

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1959.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.						Days with Temperature at or below 32°.						Bright Sunshine.																
	Maximum.			Minimum.			Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknoves.	Marchmont.	Duns Castle.	Hrs.	Days with Sun.	Hrs.	Days with Sun.	Hrs.	Days with Sun.									
	Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknoves.																							
January	47	46	43	46	48	42	17	18	20	15	16	13	26	24	23	28	24	30	88.6	25	69	26	93.4	26	93.4	26	93.4	26	93.4
February	50	52	51	56	53	52	19	18	20	15	19	13	12	10	16	14	14	15	48.7	18	43	18	58.2	19	48.7	18	58.2	19	48.7
March	53	57	54	59	59	56	31	30	28	27	30	25	2	1	3	4	4	14	76.5	22	65	20	79.7	18	76.5	22	65	20	79.7
April	62	65	63	70	68	64	31	30	31	27	29	24	2	3	3	8	2	14	164.1	29	123	29	130.0	28	164.1	29	123	29	130.0
May	65	69	68	75	69	73	31	31	33	31	32	27	2	2	...	2	2	4	199.7	31	152	30	161.2	28	199.7	31	152	30	161.2
June	80	79	72	89	82	79	36	40	43	41	40	35	...	...	...	...	...	...	203.2	27	143	26	158.5	27	203.2	27	143	26	158.5
July	78	80	76	84	82	80	39	40	43	40	39	35	...	...	...	...	...	...	190.2	28	142	27	143.1	28	190.2	28	142	27	143.1
August	78	82	76	84	83	83	42	41	46	42	42	39	...	...	...	...	...	...	175.0	28	140	30	155.0	30	175.0	28	140	30	155.0
September	78	76	72	82	78	75	39	40	41	33	36	30	...	...	...	...	...	...	158.5	25	127	26	167.7	27	158.5	25	127	26	167.7
October	73	75	68	76	73	70	33	34	35	32	33	26	...	...	...	1	...	6	108.0	27	101	28	103.2	29	108.0	27	101	28	103.2
November	54	55	56	62	57	53	22	24	25	20	21	19	7	7	4	7	5	11	38.8	16	36	14	47.8	16	38.8	16	36	14	47.8
December	48	49	48	49	50	48	29	30	30	27	28	24	7	8	15	16	8	20	19.6	10	27	16	19.1	11	19.6	10	27	16	19.1
Year	80	82	76	89	83	83	17	18	20	15	16	13	58	55	64	80	59	114	1470.9	286	168	290	1316.9	287	1470.9	286	168	290	1316.9

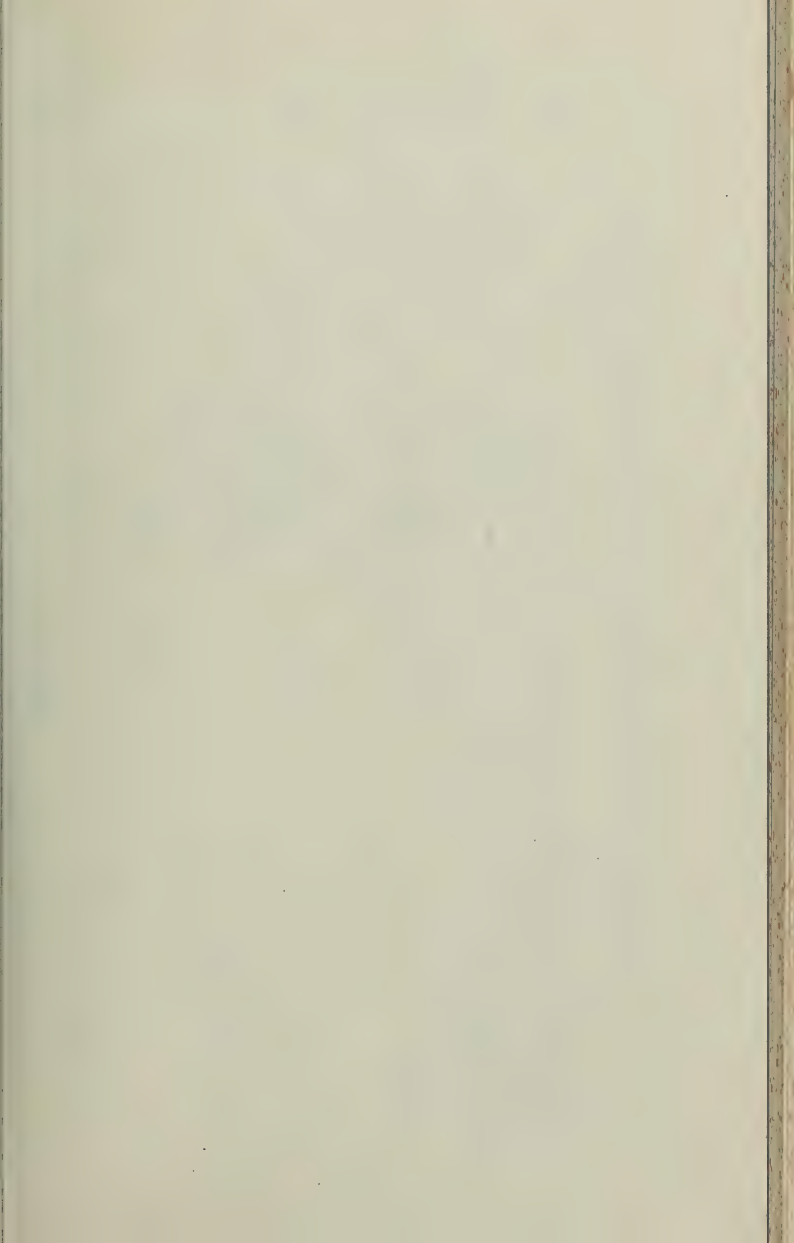
RAINFALL IN BERWICKSHIRE DURING 1959.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	St. Abb's Head.	Tweed Hill.	Whitchester.	Duns Castle.	Manderston.	Kimmerghame	Swinton House	Lochton.	Marchmont.	Cowdenknowes.	Dur tion Swinton
Height above sea-level - -	245'	50'	838'	500'	498'	300'	200'	150'	498'	300'	Ho
<i>Month</i>											
January - -	.99	2.24	1.69	1.16	1.56	1.35	1.57	1.42	1.56	1.42	4
February - -	.22	.24	.45	.46	.55	.36	.38	.39	.55	.35	10
March - -	.52	.56	.86	.68	.75	.55	.48	.48	.75	.55	10
April - -	1.85	2.03	1.90	1.87	1.95	1.80	1.50	1.66	1.95	1.09	30
May - -	.56	.47	.44	.49	.43	.25	.45	.43	.43	.23	8
June - -	1.25	2.11	1.29	1.79	2.62	1.70	1.90	2.75	2.62	2.60	30
July - -	1.33	1.49	2.67	2.79	2.16	3.20	3.13	2.12	2.16	1.66	20
August - -	.37	.42	.66	.59	.42	.48	.51	.46	.42	.32	0
September - -	.55	.66	.60	.54	.57	.62	.60	.73	.57	.74	10
October - -	2.12	1.98	2.44	2.18	2.51	2.25	1.99	1.88	2.51	1.81	20
November - -	2.11	3.95	4.75	3.88	4.90	4.35	4.23	4.29	4.90	4.00	70
December - -	3.07	3.94	4.00	3.63	3.25	4.01	3.20	2.86	3.25	2.43	70
Year - -	14.94	20.09	21.75	20.06	21.67	20.92	19.94	19.47	21.67	17.20	38

* Number of hours for which rain fell at a rate of .004 inches or more.

Note.—I am greatly indebted to Mr A. B. Thomson, of the Meteorological Office, who did most of the work of preparing these tables while I was in hospital. A. E. S.



TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1959.

RECEIPTS

Credit Balance at 20th September 1958	...	£83	9	1
Subscriptions (including Entrance Fees and Arrears)	...	435	5	0
Sale of Club Badges	...	8	1	0
Sale of History	...	3	8	0

EXPENDITURE

History for 1958	...	...	...	354	0	0
Printing and Stationery—						
Neill & Co. Ltd	...	...	£65	3	3	
Martin's Printing Works, Ltd	...	...	12	2	4	
Officials' Expenses—						
Secretary (W. R. E.)	...	...	30	12	7	
Editing Secretary (A. A. B.)	...	...	3	10	0	
Treasurer (T. P.)	...	...	6	3	0	
Delegate to British Association	...	...	10	0	0	
Subscriptions—						
Association for the Preservation of			£1	1	0	
Rural Scotland	...	...	1	1	0	
Chillingham Wild Cattle Association	...	...	2	2	0	
British Association	...	...				4
Miscellaneous Expenses—						4
"Antiquity" Magazine	...	...	1	10	0	
Insurance Premium	...	...	2	2	0	
Burgh Treasurer, Rent for Books in			1	0	0	
Library	...	...	0	15	9	
Bank Charges	...	...				5
Credit Balance at Bank, 20th September 1959	...	...				39
						0
						2
						£530
						3
						1

Note.—Loss on season's working amounts to £44 8 11.

BALANCE SHEET.

<i>LIABILITIES</i>		<i>ASSETS</i>	
Surplus at Bank : General Account	...	Cash in Bank : General Account	...
Surplus at Bank : Investment Account	...	Cash in Bank : Investment Account	...
	<hr/>		<hr/>
	£226 15 7		226 15 7

FLODDEN FIELD MEMORIAL FUND.

Donations, etc., received	£47 15 0		Cash in Bank	47 15 0
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27th September, 1959. I have examined the above Financial Statement with the books and receipted accounts, and find it correct
The Bank Pass-Book has been exhibited to me.
(Signed) P. G. GEGGIE.



HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

The Centenary Volume and Index, issued 1933, price 10/-,
is invaluable as a guide to the contents of the *History*.



HISTORY OF THE BERWICKSHIRE NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

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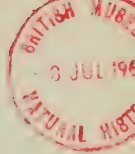
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HISTORY OF THE BERWICKSHIRE NATURALISTS' CLUB.

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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

IN SEARCH OF WILD FLOWERS.

Address delivered to the Berwickshire Naturalists' Club at Berwick, 12th October, 1960, by Mrs. Swinton of Swinton.

I have always been interested in finding flowers, and, when years ago someone gave me what was until recently the Standard British Flora, which was "Bentham and Hooker," I started to paint the illustrations of those that I found, thus becoming what Admiral Sir Wm. James, in an article in *The Countryman* calls a "Bent. Hook." This has nothing to do with fishing! Then in 1939 I heard of and joined the Wild Flower Society. This has a membership of several hundreds, and is divided into branches all over the British Isles and Ireland who compete against each other in the numbers of flowers they find, and enter the place and date in a printed diary. I have had the greatest fun out of this Society, and, have been all over Britain from Sutherland and Caithness to Devon, Kent, Norfolk and Ireland, looking for flowers. Flowers include trees, grasses and sedges, and I have always been keen on grasses since my father, Major Logan Home, used to teach me the names. He had to take a course in grasses in the Army in connection with getting fodder for horses. I don't suppose that the Army is now

concerned with anything but oil supplies. There are 1,314 plants listed in Bentham and Hooker, but in the new Flora published five years ago there are hundreds more. Some of these have arrived around the bombed sites of London and other cities.

Trees also make a very interesting study. Most people know oak, ash, sycamore and chestnut, but many do not know the difference between beech and hornbeam. Beech of course, has a nut, but hornbeam although its leaves are alike, has a long tassel of winged seeds. There are some very fine old Hornbeams in the Hirsle woods and about the banks of the Whitadder at Edrom, and as wayside trees near Marlefield at the foot of the Cheviots.

Two years ago my friend Miss Brown of Longformacus and I went to Melvich, Sutherlandshire. We went en route to a little frequented sea shore on the Dornoch Firth where I had been told the Oyster Plant (*Mertensia maritima*) still grew. We found it on the pebbly beach almost beneath the tide mark. This beautiful blue flower used to grow in Berwickshire between Dowlaw and Pease Burn in Dr. Johnston's time. From his "Botany of the Eastern Borders" I have found quite a number of plants still surviving in the places he names.

From a small hotel at Melvich where we stayed, there were the most wonderful views across the Pentland Firth to the Orkneys, and also wonderful flowers which we had come to see, especially the *Primula scotica* which only grows on the northern coast. Along the rocky cliff face there were masses of Roseroot, which we count as rather a rarity further south. We saw the Douneray Atomic station, an enormous sphere, the largest in the world we were told, sitting on the cliff like a huge football.

Last year my sister-in-law and I motored from Sussex to Norfolk, where she had heard of some rare flowers. Unfortunately she had engaged rooms at Mildenhall, and when we arrived we found it was on an American airfield, where not twenty yards off, bombers were coming and going all day and

night, and white and black Americans playing noisy games of baseball.

There was a beautiful old priory—Castle Acre, with some plants growing in the stones of the priory. Old abbeys and priories often have plants which have been used medicinally by the monks in old days, and which have lingered on for hundreds of years. I have found them at Lindisfarne, Sweetheart Abbey, and Pluscarden.

I have climbed part way up Ben Lawers but only once reached the top where the most famous Alpines grow. I was thrilled to find the lovely blue Alpine forget-me-not and drooping saxifrage quite near when I sat down to eat my sandwiches in the shelter of a rock at the top.

Five years ago the Wild Flower Society met at Forres, from where an early start was made for Aviemore and the Cairngorms. It was early June and snow still sprinkled the high tops, and we came on a deep drift near the Cairngorm itself where some of the rarer Alpines grow. There was plenty of *Loisleuria* or wild *Azalea* and dwarf cornel and other treasures on the climb up the lower slopes. It was very rough walking and numerous burns to be negotiated, and we were all glad to get back after a fourteen hours outing to a waiting bus to take us to Grantown, which we reached at 10 p.m., and where an excellent dinner awaited us.

Another of the expeditions from Forres was to the Culbin Sands or Culbin Forest. This has an interesting history. In the year 1694 the Barony of Culbin, comprising many farms and crofts and a laird's house, was completely buried in sand which was blown from the West by a series of storms of unprecedented violence. It is not known if there was any loss of human life, but land seven miles long and two or three miles wide was buried in deep sand, which also for many years threatened to engulf the rich arable land inland. In recent times the Forestry Commission have taken over the area from the owners and have planted a pine forest of many acres. The sands have been "anchored" so to speak, by

thatching them all over with branches of birch and alder pegged down with strands of wire. This was found to be more satisfactory than the older method of planting marram grass which is done in Norfolk to try to prevent coast erosion. The West wind which is the prevailing direction tends to blow the sand, and they have to try methods of preventing it engulfing the young trees. Some of the dunes in this area are as much as 100 feet high. The Wild Flower Society was taken as far as motors could go, and then we walked into the forest. We were shown *Pyrola uniflora* or One-flowered Wintergreen, *Goodyera repens*, many orchises and other interesting plants.

In 1953 the Wild Flower Society had its 50th Jubilee and about 50 members went for a few days to Appleby, Westmorland. We met every morning and were then taken to see interesting flowers which a local member had noted down previously. From Appleby we drove by a delightful road over the Pennines, bordered with *Primula farinosa*, to Teesdale which is a Paradise for the botanist. There grows the lovely *Gentiana verna*, *Potentilla fruticosa*, *Arenaria uliginosa* and many other gems. On Cronkley Fell and Widdybank Fell there are found great mats of *Dryas octopetala*, the mountain avens, and *Tofieldia*, the Scotch Asphodel and other interesting plants grow in the limestone flushes, called sugar limestone.

A few years ago we went for a motor tour in S. Ireland or Eire. We visited the West Coast and stayed at Killarney from where we made excursions to look for plants. The Burren in County Kerry is a veritable Paradise with masses of *Gentiana verna* growing even down to the sandy shore, and tufts of Maidenhair fern in the cracks of the rocks. The rare Kerry Lily (*Simethis*) grows on an island off the coast, and grows wild nowhere else until the south of France and Portugal.

There is always something new to be found if you are a botanist, and even in the last 7 years 2 or 3 new plants which were unknown before, have been discovered and added to the British List. Berwickshire has the honour of being the only

station except one in Perthshire for the rare *Aremonia agrimonioides* which grows in quantity in a wood near Duns. I have kept a record of plants found in Berwickshire and have noted 564 in the county. Longformacus moors have contributed a great many items, and Gordon marsh is quite worth exploring, but best of all is the coast with its cliffs, bays and marshes. The fine Yellow Horned Poppy and handsome Marsh Agrimony grow in Linkom Bay, and many other seaside plants and ferns.

It now remains for me to thank the Council for all the help they have given me throughout the season, but especially I should like to thank Mr. Ryle Elliot for all his hard work. The Secretary has all the work of organizing the meetings. He goes over the ground beforehand and works out the time it takes, contacts the police, arranges the parking of so many cars, sees that we all arrive near enough to get tea at the end of the meeting, takes all the grumbles and hard knocks. The Club owes a lot to its very hard working and efficient Secretary.

Reports of Meetings for the Year 1960.

Over one hundred and fifty members attended the first meeting in May. The party met in the ancient Parish Church of St. Nicholas in Dalkeith, where the Minister, The Rev. M. J. G. MacIntosh, M.A., gave an interesting address on the history of the Church, and of its foundations. Members were able to procure printed editions of this. Old Church Plate was displayed, and many tombstones were of great interest.

Later the party were received at Dalkeith Palace by one of the Club's oldest members, Sir John Milne Home, who, in a delightful manner, told us the story of the house with its

Royal connections, and later conducted parties through this gem of Carolean architecture. A picnic luncheon was enjoyed in the grounds.

Afterwards the party drove to Pathead Ford and to Preston Hall the home of Major W. Callander. Preston Hall, which will be described in a later history, was built in 1794 by the architect Robert Mitchell, and is perhaps one of Scotland's finest houses. The Club was much privileged in seeing this house, as it is rarely open to the public.

Tea was taken at the Stair Arms Hotel, to which about seventy members stayed.

The June Meeting was held in Northumberland, the meeting place being Seaton Delaval. The Church was visited first, where the Vicar kindly welcomed us, and once again we were fortunate in having such a gifted speaker to tell of its history and its architecture. At Delaval Hall we were graciously received by Lord Hastings, and a talk was given by Professor Edwards of the Chair of Architecture of the University of Durham. Later, we were able to see much of what remains of this vast and noble Vanburgh building. The party then drove to Seaton Sluice where the Vice-President spoke of its original construction. Tea was taken at the Queen's Head Hotel at Morpeth. Notes on this Meeting will appear in the History.

The third Meeting for the year was held at Dunbar ; about one hundred and sixty members attended ; perhaps one of the most successful meetings for the past years ; the rendezvous was Broxmouth Park, one of the homes of His Grace The Duke of Roxburgh. Here we were fortunate in having as a speaker G. S. Murray, Esq., the Secretary of the East Lothian Society, to speak. Mr. Murray told in detail the plan of Cromwell's strategy for the battle of Dunbar. After a welcome cup of coffee, kindly provided by the owner, the party then drove to the site of the battle. On the top of the hill Mr. Murray told in vivid detail the full account of the battle and its consequences. Seldom has a speaker made anything so real, as this description given by Mr. Murray. After a picnic

luncheon Dunbar Castle and harbour were visited, the Rev. E. M. Ivens telling the history of the castle ; later, the Dunbar Lifeboat was brought alongside and members were able to board her.

At the Town House the Club was received by the Provost, and shown over this historic building. The party then drove to the village of Stenton, one of East Lothian's prettiest spots. In the church we were welcomed by the minister the Rev. A. R. Stark. There was much to see, and it was with reluctance that we drove away to take our tea. The Secretary expressed his gratitude to Colonel and Mrs. Vernon who had done so much to make this day a success.

The August Meeting brought out over a hundred members to High Rochester and the Roman Camp of Brementium. The Vice-President, R. H. Walton, Esq., took charge of the party, and with maps, and verbal details we were able to visualise the original Roman Camp, of which nothing has been excavated since the last century. After luncheon members drove some miles to another Roman Camp, that of Habitancum, where again Mr. Walton, together with Miss R. Donaldson-Hudson, explained the general lay-out and made history live once again. Detailed notes of this meeting are included in this volume. After a day in the open air with a cold August wind blowing, tea at Otterburn was most welcome.

The last Field Meeting for the year took place at Raecleugh Head. Once again fortunate with the weather about one hundred members gathered on this promontory of the Lammermuirs to visit two ancient settlements, one Pictish, and the other possibly Danish. Of these Danish camps more will be written in a later issue. Much research is being done, but it is impossible as yet to make any detailed observations. After a wonderful drive through the hills, the Watch Water, Berwickshire's Reservoir was reached, and the County Engineer took members over the Filter Station, etc. Tea was taken in Duns.

At the Annual General Meeting, in October, held in the Tweed View Hotel, Berwick-on-Tweed, many members were present to hear Mrs. Swinton of Swinton give her Presidential Address. Mrs. Swinton is a botanist of no small renown, and the Club is ever grateful to her for her interest and her efficiency as President. The address, with its pictorial detail was one of supreme interest and value for the annals of the History. Mrs. Swinton handed over her flag of office to her successor R. H. Walton, Esq., and nominated her successor The Rev. J. I. Crawford Finnie, F.S.A.Scot., as Vice-President.

The Treasurer made his report, and the Secretary thanked the members for their kindness and co-operation during the past season. The resignation of A. A. Buist, Esq., M.A., W.S., F.S.A.Scot., as Editing Secretary, was received with regret. As a mark of appreciation, at a meeting of Council, Mr. Buist was presented with a small alabaster figure suitably inscribed, with the hope that he would long be able to enjoy membership of the Berwickshire Naturalists' Club.

Secretary's Report, 1960.

As the years go on the Berwickshire Naturalists' Club increases in numbers, and in the variety of its aims. By this time most of the Members should have a fairly experienced knowledge of the different types of early settlements, and should be able to recognise them almost at a glance. Having also had unique opportunities to study the various other types of architecture both ecclesiastical and domestic, almost every attending member should, by this time, be able to answer, and to describe, these various periods and styles. It is not without difficulty that many of the meetings are arranged and these are not in fact merely "Outings", but arranged with the purpose of increasing, not only our knowledge of local history, but our ability to differentiate the character of each successive century.

Undoubtedly, one cannot expect to be acutely interested in all things, but the truly cultured mind is ever willing to digest with interest even those facts, which at the time, may seem dull, and devoid of personal interest. This is in reality the basic idea behind the formation of the Club. Let us not be like the lady, who had only ten minutes between changing

trains at Pisa ; hurrying up to a porter she asked, " What have I time to see in ten minutes ? " He replied, " Signora, the doors of the Baptistery." As she re-entered the train she spotted the porter, and in an aggrieved tone said, " They were shut."

It would be gratifying to think that each member was doing his or her part in forwarding the Natural History element of the Club, even if only to make a list of the wild flowers that grow round and about his or her own door. It is not sufficient that we merely have " a lovely day out " but each member has his or her responsibility to the fundamental principles of the Club, as laid down in 1831.

The Secretary would be grateful to be told of any " Finds " be they ever so small, and in any field, archaeological, botanical, or historical.

Treasurer's Report, 1960.

I have to report a surplus on the season's working of £62 14s. 4d. Last year (1959) the Club had a loss of £44.

Receipts from Subscriptions, Entrance Fees, etc., for the year amounted to £500 3s. 10d., and Payments for the year were £437 9s. 6d., showing a surplus of £62 14s. 4d.

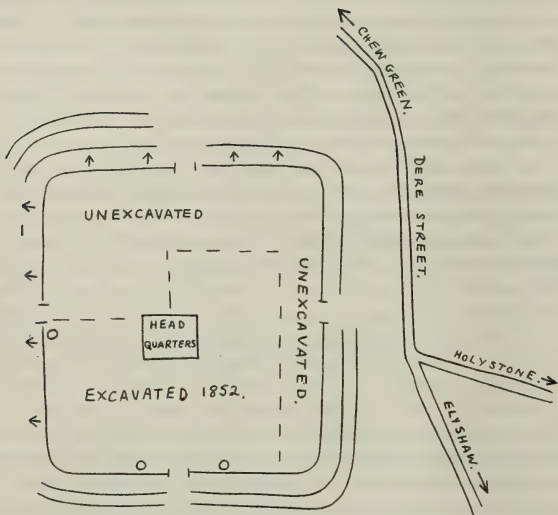
The Credit Balance on General Account at the commencement of the season was £39 0s. 2d., plus a surplus of Income over Expenditure for 1960 of £62 14s. 4d., giving a balance on General Account at end of season of £101 14s. 6d.

The Club's Reserve Account with the Trustee Savings Bank, Berwick-on-Tweed, now amounts to £192 6s. 10d.

The Balance Sheet shows cash in the National Commercial Bank General Account as £101 14s. 6d., and in the Trustee Savings Bank Reserve Account £192 6s. 10d., making a total of £294 1s. 4d.

The Flodden Field Memorial Fund as brought forward from 1959 amounts to £47 15s. 0d., plus Interest of 7s. 7d., making the total cash in bank £48 2s. 7d.

The Club's Accounts have been audited by Mr. P. G. Geggie, of the National Commercial Bank, and I would like to take this opportunity of thanking him for his kindness in doing so.



BREMENIUM.

GROUND PLAN.



- TOWER.
- ↑ DIRECTION OF CATAPULT FIRE.

┌ EARTH BANKS.

THE ROMAN FORT OF BREMENIUM. HIGH ROCHESTER.

By R. H. WALTON.

The small and ancient township of High Rochester stands completely within the walls of the Roman fortress of Bremenium. Two peel towers converted to domestic use and cottages and farm buildings, some in ruins, present much the same appearance as they did when, in 1852, the site was excavated by order of the Duke of Northumberland.

The traveller and historian, William Camden, passed this way in 1599 and, from an inscribed altar, identified the fort correctly as that of Bremenium, mentioned in the Antonine Itinerary of the early third century.

The results of the 1852 excavation, in which three-quarters of the fort was uncovered, was supplemented by more up-to-date work carried out in 1935 by Professor Ian Richmond.

The later work served to establish more fully the precise date of the different building layers and the complete report may be read in the Northumberland County History, Vol. XV.

Bremenium, actually the most northerly Roman fortress in England, is one of a chain of military stations along the line of Dere Street which, is a continuation of the main Roman road from York. Dere Street passes through the Wall at Portgate, north of Corbridge and extends northwards again to Newstead, near Melrose, its final destination being the Firth of Forth at Inveresk.

To sketch briefly the course of Roman rule in Britain, you will recall that, a hundred years or so after Caesar's first short campaigns in southern Britain in B.C. 55 and 54, the Emperor Claudius, in the person of his general Aulus Plautius, in a swift and successful campaign subjugated the country as far as the Midlands. After the fierce and unsuccessful revolt of Queen Boadicea or Boudicca of the Iceni in A.D. 61, conquest was extended to the whole country as far as the

Firth of Forth. This culminated in Agricola's very successful operations in northern Scotland in A.D. 80 to 84.

Dere Street, if it was not already in existence as a British road, was probably constructed at this time. As part of the same policy, the Tyne—Solway line of forts were built, together with forts of Bremenium and Trimontium along the line of Dere Street. These were, respectively, at High Rochester on the Rede and at Newstead near Melrose. All these forts were built of turf with wooden palisades.

Following the recall of Agricola in A.D. 85, we know nothing more until A.D. 117 when it is certain that all ground north of the Tyne was lost in a most serious invasion from the north. In A.D. 120, the Emperor Hadrian came to Britain in person to take command. Hadrian was a remarkable man and the most travelled and probably the most sophisticated of the early emperors. He had visited every corner of his vast empire and took great interest in the individual customs of his various peoples. On his arrival in Britain, he took immediate steps to regain all that had been lost in the north and to remodel the system of defence.

He ordered the rebuilding of the Tyne-Solway defences, of which the major work consisted of what is now known as Hadrian's Wall. This was of turf from Bowness in the west to the Irthing and of stone from there to Wallsend. The turf construction was simply because there was no stone available from which mortar could be made. Throughout both turf and stone wall were built stone forts, mile-castles and turrets.* The Wall was not to be a purely defensive structure, as this had been found to be useless. It became a grand and impressive "front" for Roman power in Southern Britain, beyond which no incursion would be tolerated.

At a later date, however, even this measure was found to be insufficient and, in A.D. 139, in the second year of the reign of Antoninus Pius, Hadrian's son and successor, operations were begun under the direction of Quintus Lollius Urbicus to reoccupy Dere Street and its forts. This was accomplished in due course, the forts being rebuilt in stone. A new fort was built at what is now West Woodburn and called by the Romans *Habitancum* and by the Anglo-Saxons

Risingham, by which name it is best known. This was a small fort of only four acres guarding the crossing of the River Rede.

The new plan was simple and sound. Dere Street became a spear pointed at the heart of the hostile Lowlands with the head at Newstead and the shaft formed by the lesser forts, of which Bremenium was the largest. From these strong posts, each containing upwards of 500 men with its due proportion of cavalry, forces could be sent out to east and west against the flank of any attack on the Wall, probably with co-operation from sea landings.

The proof of the soundness of this policy lies in the fact that no further inroads from the north are known to have taken place from A.D. 138 until A.D. 181. In this year or thereabouts, war with the Maeatae broke out and, either because the army had become stale, the forts had "become ruinous," as recorded on a stone at Habitancum, or through an error in policy or command, the whole area from the Firth of Forth to York was over-run and devastated, in spite of the efforts of the Governor of Britain, Ulpius Marcellus. It was at this time, incidentally, that it is believed that a whole legion, the Ninth, was destroyed.

This disaster was followed, in A.D. 193, by the assassination of the Emperor Commodus, which led to civil war in Europe between the chief contenders for the Imperial Throne, the Governor of Britain, Albinus and Septimus Severus. This contest absorbed most of the Roman Army in Britain.

Severus gained the advantage, became Emperor and returned to Britain to "restore order." It is interesting to note how often it is recorded that Roman armies returned to Britain and "restored order." The fact is that this operation was not a judicious police action. The Romans were liberal enough on the initial conquest of a tribe or nation, but insurrection was dealt with very harshly indeed.

First of all, the efficient and heavily armed legions methodically trapped and annihilated such of the enemy as could be brought to battle. They either beheaded or crucified all directly concerned in the revolt. They then turned to the remainder of the people, hunting them down, burning their homes and, finally, shipping the survivors away to the slave

markets of Europe. Thus whole tribes disappeared from sight and memory. Although in the later years of the Roman Occupation, the British themselves do not seem to have been the victims of Roman retaliation, they became so dependent on the Imperial Forces that, when the Romans evacuated the Island in the fourth Century, they left behind them a people curiously unprepared for defence. The Romano-Britons consisted of a civilized upper-class minority, indifferently supported by a labouring minority deprived of spirit and the tradition of victory to face invaders to whom the Romans were, in most cases, only a name.

To return from this digression, we know that Severus drove out the Maeatae and their allies and, in A.D. 208, rebuilt the Wall and the Dere Street forts of Habitancum and Bremenium, Newstead being abandoned for good. Bremenium now took its place as the spear-head of a reduced policy of active defence, its fortifications remodelled and, as we shall see, equipped with more up to date weapons.

From inscriptions we know that, following this rebuilding, a formation of "Exploratores" or Scouts was stationed here entitled, incidentally, to double rations. No doubt their role was that of political troops whose duty it was to keep in touch with local tribes and give warning of more serious trouble. It is interesting to note that, by the middle-ages, "exploratores" was the term given to similar troops with the English translation of "Scouts," which in turn became used in the sense of spies. The leader of the Parliamentary secret service during the Civil War of 1643 was known as the "Scout-Master."

As part of the Severan reconstruction, Bremenium was equipped with heavy artillery in the form of Ballistae or giant catapults throwing very large, roughly spherical stones or leather bags of pebbles. A stone dedicated to the short-lived Emperor Elegabalus in A.D. 235, commemorates the reconstruction of the gun positions by the Ballisterii or gunners. The probable range of these weapons was about three hundred yards and, apart from the effect of solid shot, it would be no laughing matter to be pelted with a bag-full of stones as an alternative. This type of artillery lasted on into the Middle Ages.

Bremenium and the town-
ship of High Rochester.
View from S.S.E. showing
remains of tower.

Photo: R. H. Walton.



Stones from demolished
rectangular cippi built
into stell beside Dere
Street, $\frac{1}{2}$ mile S.E. of fort.

Photo: R. H. Walton.

Circular Roman cippus or
tomb on Dere Street, $\frac{1}{2}$
mile S.E. of fort.

Photo: R. H. Walton.



A long period of peace seems to have followed, in spite of unrest on the Continent. In A.D. 286, however, the "British Emperor," Carausius led a revolt in company with his assistant Allectus who, in due course murdered him in the usual manner of the times. Allectus continued to rule until A.D. 296, but the revolt had given the opportunity to the northern enemies to over-run the North as far as York, in the course of which, as might be expected, the Dere Street forts were destroyed.

The Emperor Constantius recovered the Island in A.D. 296 and rebuilt its defences, including Bremenium and Habitancum. The surviving gateway at Bremenium dates from this period.

Little is known of the fortunes of the Romans in the north during the next forty years, but it is fairly certain that, between A.D. 340 and 350 the final attack took place in which Bremenium was burnt for the last time, either by the enemy or as a deliberate act of the Roman troops in the course of evacuation. The latter event seems likely in view of the fact that the usual scattering of useless copper coin by the victorious Barbarians is absent compared, for instance with the scene at Borcovicus, which is known to have been stormed, and where large quantities of these coins have been found both within and without the fort.

So much for the history of Bremenium, reconstructed from a patch-work of miscellaneous finds and fragments. The remains of the stone fort as seen to-day dates from the time of Constantius or a little later and we know, from the excavations of 1852, that the four acres inside the walls were packed with buildings designed for the efficient running of the station and the wellbeing of the troops. All this was constructed with the usual skill and thoroughness of the Roman military engineer.

Drains, running water, bath-houses and, of course, central heating were provided. The *Principia* or Headquarters had an underground strong room for the treasure or pay-chest and there was provision for large quantities of corn.

A typical Roman Army station abroad, it was for many years the home of those soldiers who, rarely of Latin blood themselves, fought the Emperors' battles and dedicated their

victories to them. Whatever we may think of the Emperors themselves, we can only admire the rank and file of the army, the comparative integrity of the civil service and the thoroughness of the military engineers.

Although Bremenium is on Dere Street, the road itself does not pass through the fort. It crosses the Rede near Elishaw by a wooden bridge long since destroyed though guarded by a minor earth fort at Blakehope which is still to be traced.

Running diagonally up the hillside, it passes through the township of Horsley, crosses the moor and passes round the east side of the fort on its way towards the Sills burn and Chew Green. From a point near the east gate starts the minor road to Holystone and beyond to meet the Devil's Causeway near Bridge of Aln.

The fort itself is surrounded on three sides by multiple earth banks and ditches and the main walls are of stone and of great thickness. There were, originally, gateways on all four sides of which only one remains on the south-west side.

There were isolated towers on the south-east and south-west walls of which the remains of one can still be seen. The walls were specially reinforced to take the recoil of the catapults mounted thereon.

There were numerous marching camps along the line of Dere Street and, as might be expected, there are several in the vicinity of the fort. It must be remembered that, apart from lack of space within the defences for passing bodies of troops, it was always the custom of the Roman Army when on the move to halt and dig-in for the night, whether in hostile territory or not. This operation consisted in digging a defensive bank and ditch, the bank being crowned by stakes of which each soldier carried one. Each camp site was thus proportional in size to the body of troops which constructed it. Hence the multiplicity of camp sites to be found to-day.

The majority of marching camps around Bremenium are to be found along the Sills burn within convenient reach of water. Only last year, the lower half of a typical army quern or corn grinder was found near Bellshiel in this area.

Dere Street must have been "under fire" throughout much of its useful life, but it must not be supposed that life at Bremenium was always hard, dull or lonely for the Roman

troops stationed there. The soldiers' accommodation would compare favourably with the barrack-rooms of many huddled camps of to-day. Constant traffic on the road would spell distraction if not excitement and we who live in these parts have rarely found the winters intolerable.

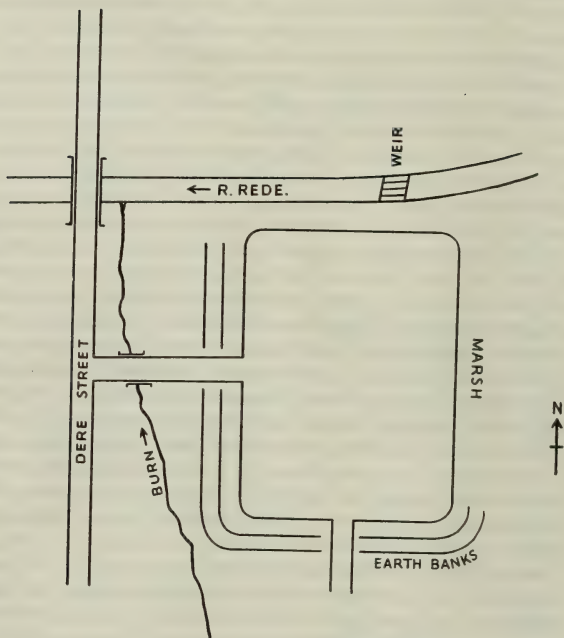
Sport, as to-day, would be available and, no doubt indulged in to the full. Friendships might be struck up with the more approachable of the local population who, no doubt, would be no more than serfs to their own over-lords. Marriages of a temporary nature could be arranged, as happens in every army of occupation. The British village connected with the camp has been located where the Artillery Camp stands to-day.

That there was the possibility of peace and a reasonable standard of living is shown by the many finely carved altars and memorial stones which have been found here. There is a remarkable group of "Cippi" or tombs in the Roman manner, of which, unfortunately, only one remains. These are to be found on the line of Dere Street about half a mile south-east of the fort. Common enough outside any Roman town in Italy, these are said to be the only examples of Cippi in Britain, and for this reason must be of especial interest to us. It is possible that some officer or senior official of the fort liked it well enough to order his last resting place to be fashioned in the style of his native land or, I fear, refused to alter his ways for a pack of "natives."

So the Cohort marched away from Bremenium for the last time, with its rear-guard at the alert, and leaving the fort unroofed and smoking. One can, perhaps, imagine long afterwards when peace had come again, the grubby children from the village across the burn and of *very* mixed parentage, playing Romans and Scots in the deserted streets, whilst high above them wheeled the golden eagles and ravens as they sometimes do today, looking down on the ruins of what was once Rome's most northern fortress.

Full acknowledgements to the Editors, *Northumberland County History*, Vol. IX.

* This work included the excavation of the Vallum.



HABITANCUM

PROBABLE LAY-OUT A.D. 208

THE ROMAN FORT OF HABITANCUM. WEST WOODBURN.

By R. H. WALTON.

Habitancum was, like Bremenium, visited by Camden in 1599 and identified correctly from an inscribed stone found there. This fort, which occupies an open position overlooking the valley of the Rede west of West Woodburn, has been known since Saxon times as Risingham.

Little or nothing remains of the stone-work which has, long since, found its way into the fabric of West Woodburn and the surrounding farms. Indeed, many inscribed slabs of convenient size were made to serve as flagging for kitchens or as shelves for larders.

As one of the principal forts on Dere Street, Habitancum shares much the same history as Bremenium except that it did not come into existence until the time of Antoninus Pius. In the course of the operations conducted by Quintus Lollius Urbicus to reoccupy Dere Street, the decision was made (in all probability) to bridge the River Rede to replace a ford which had become unserviceable. In support of this theory, it may be said that the Rede, which can be quite deep in places, occupies a shifting channel in the broad valley west of West Woodburn. It may be supposed that, for some years after the first building of Dere Street, the channel was well out in the open valley, quite wide and therefore easily fordable. The need of a bridge would only arise when the river worked its way over to the south side and close to the high ground over which Dere Street passes on its way down to the valley.

It can be seen, today, that the river did indeed encroach still further on this higher ground, sufficiently to wash away at a later date part of the fort itself, before moving away again across the valley to occupy its present course along the northern side.

The decision to build a bridge made necessary a fort of some sort to guard it. This fort was built about A.D. 140

of turf and about three acres in extent. Its builders and garrison were provided by the 4th Cohort of Gauls, who left behind them a most elaborate and decorative inscribed slab. This unit was of 500 men of whom a proportion were cavalry. As a matter of interest the Gauls, for many years, supplied the entire regular cavalry of the Roman Army.

The disasters of A.D. 181 and after affected the whole of the North and involved the capture or abandonment of Habitancum. It was, however, rebuilt in stone by Septimus Severus on his arrival in Britain in A.D. 208 and to him was raised a remarkably fine dedicatory slab.

It was at this time that the famous Ballistae or catapults were installed at both Bremenium and at Habitancum to establish these places as strong points on the new defensive system.

The Severan rebuilding, though repaired and added to in later years, set the general nature and style of the fort until the end of its days. Unlike Bremenium, Habitancum seems to have become more a civil than a military station, serving as a headquarters for some sort of local government.

It was virtually impregnable to local attack and its proportions were sufficiently large and impressive to discourage anything but the most ambitious enterprise.

Measuring roughly 400 by 500 feet, its massive walls were pierced by only three gateways, the eastern wall overlooking what was then a marsh. Multiple earth banks and ditches flanked the southern and western sides.

Dere Street passed by the west wall and crossed the river by a bridge, presumably of timber, situated to the north-west of the fort. Below the bridge was a weir, designed to provide still water around the bridge abutments.

All this was in the best tradition of Roman engineering.

Habitancum remains virtually unexcavated, but the work done by Professor Richmond in 1935 established the main chronology of the site. The bath-house at the south-east corner was uncovered by Richard Shanks of Park House in 1849. This excavation disclosed a large quantity of coal which was appropriated to modern use, but it showed that Roman coal workings were well established by the third Century.

To continue the story, the arrival of Constantius in A.D. 296 to eject the rebellious Allectus spelt disaster once more for the northern forts when the enemy took advantage of the diversion to ravage the country as far as York. Habitancum was destroyed, but was repaired and partially redesigned by Constantius and military routine was restored and life went on as before.

After another long period of peace, trouble started again in the middle of the fourth Century. This appears to have been due, in part, to a breakdown of the political and intelligence system, even amounting to collaboration and treachery on the part of the "Arcani," who had replaced the original "Exploratores" of Hadrian's time.

Whatever the cause, the effect was a rapid deterioration in the situation, culminating in the second "Pict War" of A.D. 379 in which Habitancum was again burnt. Although the massive reprisals in the person and under the leadership of Stilicho, brought fire and sword to the whole land of the Picts and restored peace of a sort, the northern defences were finished. They were replaced by a pro-Roman state or states stretching from Traprain in the East to Glasgow in the West. All life departed from the once busy area between Tyne and Tweed which, for nearly four centuries, had felt the tramp of Roman feet.

Habitancum was, indeed, rebuilt and was used sufficiently to show signs of wear, but whether as a military or a civil centre we shall never know.

It stands to-day a calm and empty space, shorn of its walls and towers, but contemplating a view little changed from that which was to be seen on the day it was built.

Full acknowledgements to the Editors, *Northumberland County History*, Vol. XV.

THE HARBOUR OF SEATON SLUICE.

By R. H. WALTON.

Seaton Harbour, at the mouth of the Seaton Burn, was in existence in the 16th Century or earlier as a natural inlet for small vessels. It was first developed as an artificial harbour soon after the Restoration of Charles II by Sir Ralph Delaval the first baronet.

The Monarch himself was interested in the enterprise, made Sir Ralph the Collector and also the Surveyor of the port and promised financial aid in its construction.

A Member of Parliament for the County throughout the reign, Sir Ralph Delaval was concerned in local industries, as were most of the Northumbrian landowners of the period. Besides building the harbour at Seaton, he developed his collieries at Hartley and at Seaton Delaval, built up a trade in copperas, a by-product of the collieries, constructed a salt-pan and also a glass factory, the last two as a natural outcome of the availability of coal, sea-water and sand.

The harbour suffered from the damaging effect of the tides and rough weather and was prone to silting up. The first was remedied after much trouble by the construction of a break-water composed of timber and stone designed to give both strength and flexibility. The second was remedied by a sluice within the break-water which was so made as to dam the water in the harbour at high tide and to release it at low tide. The effect of this was to scour the silt from the bed of the stream.

Sir Ralph, having completed this work, then mounted a battery of guns on the point above the break-water. From these achievements a thriving export trade was set up which soon recouped the builder for the heavy expenses incurred, of which the sluice alone cost £15,000. The King, who had promised £1,500 towards this, ultimately contributed £500.

The profits from the business were immense and trade went on at Seaton Sluice, as it was now called, under various

branches of the family until 1746 when, under the management of John Hussey Delaval, further improvements to the harbour facilities were made. The principle work was the cutting of a channel through the solid rock of the headland to allow access to the sea at all states of the tide and weather. This remarkable work, which can be seen to-day, measured 900 feet in length, 20 feet in width and was 54 feet deep. It was equipped with a sluice gate at the outer end and the necessary lifting gear for loading ships. This arrangement was effected in conjunction with the existing sluice.

In 1763, Thomas Delaval, having adapted the glass factory to the manufacture of bottle glass, built a flat glass factory followed by another to make black glass ware. For these he used, as raw materials, sand from the adjacent dunes and black clay from beneath the sand.

Other projects followed which included a brewery, a brick works and a quarry for building-stone from the last of which came, perhaps, the magnificent cylindrical gatepost of almost Roman proportions which may be noticed at the entrance to a field on the road between the Hall and the seashore. In fact, the Delavals at this time boasted that, with the fuel and materials around the harbour, they could manufacture almost anything.

However, although the various works survived for many years, by 1820 the harbour was a shadow of its former self and when, in 1862, the great pit disaster at Hartley ruined the coal trade locally, the harbour as such fell into decay and, in 1897, the last of the glass works were demolished.

It might be said that, industrially speaking, the Delavals were before their time and that the ultimate failure of Seaton Sluice as a port was due to competition from other parts of the country served by bigger harbours and by the new railways.

To-day, the sluices have gone, but the Cut and part of the break-water and quays remain and these, with some charming old houses, give us a glimpse of the past and the contribution once made by rural Northumberland to the Industrial Revolution.

Full acknowledgements to the Editors, *Northumberland County History*, Vol. XV.

SOME THOUGHTS ON THE TRIAL AND EXECUTION OF WILLIAM WALLACE

By R. H. WALTON.

William Wallace fought for the independence of Scotland against the power of Edward I and his English Armies. He was defeated at Falkirk on August 12th, 1298, his army scattered, he himself disowned by his erstwhile brother-in-arms and, after another seven years of independent guerilla warfare, was captured by the Scots themselves and delivered over to Edward I as a prisoner.

His trial, as it appears to us now, was an unjust one in that he was tried as a traitor to Edward I, found guilty and executed with all the barbarity which the trial of a traitor involved. How could this happen to a man whose only crime appears to have been to have defended his country against an aggressor? Why was King Edward so merciless?

It is true that, as a result of the formal capitulation of the Scottish Government at Irvine on February 9th, 1304, Wallace was excluded and subsequently outlawed and that he continued to fight the English when and where he could.

It might be that, in the manner of invaders through the ages, Edward I hoped to strike terror into the hearts of any other Scots who might decide to continue the fight for Scottish independence. Whatever the strength of these arguments may be, it is certain that Wallace was not tried as an outlaw, nor as one who had fought on after an armistice. Wallace was tried as a traitor.

Now, although there is no doubt that Wallace was, by birth, a Scotsman, he was by name and family a Briton or Wallisc. He was, in fact, William the Wallisc, or Briton. This is still further proved by the four known contemporary instances where his name was specifically written down. These were:

1. 11th October, 1297. A letter to the merchants of Lubeck giving notice of free trading facilities at Scottish ports

following the liberation of Scotland from the English. (In Latin). Signed : " Willelmus Wallensis."

2. 7th November, 1298. Protection to the monks of Hexham. (In Latin). Signed : " Willelmus Wallensis."
3. 29th March, 1298. Deed conferring the Constabulary of Dundee on Alexander Scrimgeour. (In Latin). Signed : " Willelmus Walays."
4. 9th February, 1304. Treaty of Irvine. (In French). Referred to as, " Monsieur Guillaume Galeys."

The name " Wallace," written in later years was an anglicization of Wallisc, just as the name Francis, Morris and Alan are probably derived from Francois, or Frank and Moorish and Allemagne.

In mediaeval English, the consonants " G " and " W," when used as initial letters, were virtually interchangeable. In French, " G " was used as an initial letter where " W " would be used in English. For example :—Guillaume and William ; Gallois and Welsh.

The word Wallisc was that used by the Anglo-Saxons to describe the native Britons and Romano-Britons, which they eventually conquered or drove into Wales. The word is the same as Gaul, with which the inhabitants of Britain were identified at the time of the first Roman invasion.

It is thought to mean, basically, " Stranger " and was first applied to the race which invaded Europe about 400 B.C. and which nearly conquered the Romans. It appears again in the Walloons of Belgium, the county of Galloway, in Scotland, Galway in Ireland and, of course, Wales.

When the British were conquered on what is now English soil, and after the remainder had moved into Wales, they acquired an unusual status as a half-subject race living quite freely, not as slaves, but almost under sufferance. They were not trusted sufficiently to be allowed to carry arms until the reign of King Alfred, who was the first Anglo-Saxon king to incorporate them in his military forces to fight against the Danes. Wallisc communities existed amongst the Anglo-Saxons. It is not known whether they had their own laws, although there is some reason to think that they had, but they were rated at a lower " Weregild " or rate of compen-

sation for death or injury than that for Anglo-Saxons. One thing is certain. They were, in every way, subjects of the reigning king.

These Wallisc communities still existed in the early Middle Ages, being identifiable by the place name Walton, Walsham, etc.

Across the border of Wales, were the pure Wallisc who brewed Wallisc Ale and were both independent and hostile until their final conquest by Edward I, after which they merely became hostile. Both Edward I and his successors took the trouble to record and maintain the existing law in Wales, as they found it. The Welsh, however, were not regarded in England as entirely loyal until at least the end of the 15th Century.

The term "Wallisc" would, therefore, be quite well understood in political and legal circles in England and in Scotland at the end of the 13th Century when Wallace was creating havoc with the English forces in Scotland and Northumberland. It might well have been used as a valid excuse for his extermination and execration as a renegade subject of the king of England.

Something of the same sort occurred when, at the termination of Edward I's final Welsh campaign in 1282, and after the death in battle of Llewellyn, his surviving brother Prince David was captured and hung, drawn and quartered. This may have been done in a spirit of vindictiveness or as calculated terrorism, but it was legally permissible.

At a much later date and following the 1745 Rebellion, those of the Scottish prisoners from Culloden and other engagements who had not already died from ill-treatment or starvation, were brought to London and hung at Tyburn, after which their bodies were solemnly beheaded.

The fact that Wallace was a brave man, an outstanding leader and in every way honourable, could make no difference to his identity and status as a Wallisc and, as such the legal subject of the King of England, against whom he had chosen to fight. His end, though tragic, was inevitable.

“ THE ANGLO-SCOTTISH LORDS OF LEITHOLME AND GREAT STRICKLAND ”

By G. H. S. L. WASHINGTON, M.A., F.S.A.

INTRODUCTORY

In a paper of the above name, read before the Cumberland and Westmorland Antiquarian and Archaeological Society and published in the Society's Transactions (1960, Vol. LX, New Series), Mr. Horace Washington, a well-known American antiquary and the author of "The Early History of the Stricklands of Sizergh," has given an account of the ancestry of Christian de Letham, wife of Walter FitzAdam and heiress of Great Strickland in Westmorland. From her stems the "ancient and knightly family" of Strickland, which still flourishes at Sizergh Castle near Kendal. There are also numerous collateral branches, descended through the female line, and represented in the United States by the Washingtons of Virginia and the Carletons in New England, whose ancestry can be traced back to Christian's kinsmen, the Earls of Dunbar.

One facet of Mr. Washington's researches, which should be of special interest to the Berwickshire Naturalists, is that he has been able to trace a feudal family link between, on the one hand, the Earldom of Dunbar in general and the Manor of Leitholm in particular and, on the other, various manors in Cumbria and Co. Durham.

With great kindness and courtesy Mr. Washington has allowed me to give here an abstract of his paper on "The Anglo-Scottish Lords of Great Strickland and Leitholme."

He tells me that he has written a second paper on the early owners of Leitholme, entitled "Strickland and Neville" and due to be published next year, to which we may look forward with interest.

RUTH DONALDSON-HUDSON.

The chronicler Jordan Fantosme records that during the invasion of the English border counties by William the Lion

in 1174, "an old grey-headed Englishman," Gospatric son of Orm, had treacherously surrendered the castle of Appleby to the invading forces.

This Gospatric (*fl.* 1145-79) is familiar to Cumbrians as the ancestor of the Curwens of Workington, in West Cumberland. Less well-known, and hitherto overlooked by most northern antiquaries, is Gospatric's first cousin, Ketel, son of Dolfin, with whose descendants we are now concerned. From Ketel is descended the very ancient and knightly family of Strickland of Sizergh.

According to the *Chronicon Cumbrie*, Waldeve (or Waltheof) of Allendale, *c.* 1100, gave to his sister Gunhilda, wife of Orm, son of Ketel (son of Eldred), the Cumbrian Manors of Seaton, Camerton, Flimby and Grey southern; while to another sister, Maud, wife of Dolfin, he granted the adjacent manors of Little Crosby, Langrigg and Brigham.

Gospatric, son of Gunhilda and Orm, was named after his maternal grandfather, Gospatric I Earl of Dunbar, *fl.* 1067, 1072, who was cousin-german to King Malcolm III.

His cousin Ketel, son of Maud and Dolfin, received from the Dunbars, who were its overlords, the Berwickshire Manor of Letham, or Leteham (now Leitholm), in the parish of Eccles—where Earl Gospatric III founded a nunnery, *c.* 1165-66. It is possible that Ketel and Gospatric son of Orm were related not only through their mothers but also on the fathers' side; for Ketel was enfeoffed with the English Manor of Great Strickland (near Appleby), together with other lands in Westmorland, by William de Lancaster of Kendal (*d.* 1170). This William de Lancaster was the son of Gilbert, who in turn was brother to Orm's father, Ketel, son of Eldred.

Owing to his tenure of Letham, Ketel son of Maud and Dolfin frequently appears as a witness to the 12th century charters of his powerful relatives, the Earls of Dunbar. We find "Ketel son of Dolfin" attesting two confirmations of the churches of Edrom and Nesbit issued by Earl Gospatric III (*fl.* 1139-66) to the monks of St. Cuthbert of Durham now settled at Coldingham. An additional confirmation of this grant, given in 1166 by Earl Gospatric's son, Earl Waldeve (*d.* 1182), was witnessed by, among others, Ketel de Letham,

Alden the Earl's steward, and Patric *fratre Comititis* (who was lord of Offerton in Co. Durham and father of the original William de Washington *alias* de Hartburn, both the latter manors being also in Durham).

An agreement between Earl Waldeve and the monks of Coldingham, concerning land in Raynington, had as witnesses, among others, Ketel de Letham and Ketel *filio suo*, from which it is clear that there were two successive Ketels of Leitholm, father and son. The wife of one of these Ketels (probably the younger) was called Ada, for in the Durham *Liber Vitae*, the following names are inscribed in a 13th century hand: *Comes Patricius, junior, filius Waldeir Comititis; Patricius (senior) avunculus ejus; Ketel, et Ada uxor ejus*, etc.

Ketel, son of Dolfin is further mentioned in the charters of the near-by Cistercian Nunnery of Coldstream, founded in 1165-66 by Earl Gospatric III and his wife, Countess Deirdre. The foundation charter was witnessed by "Walter (Waldeve) my son," Chetel de Letham and Gilbert Frazer. Earl Patric I (*fl.* 1185-1232) made the nunnery a further grant of lands at Scaithmore by three charters, *c.* 1182-5, attested by Patric son of Edgar (of Dunbar), Walter son of Edgar, Roger de Merlay, Robert de Vaux, Gilbert Fraser, Ketel of Letham, and Master Henry de Eccles. Another grant made by William, son of Patric de Washington, of lands "in my fee at the Hirsell," was witnessed by Ketel de Letham among others.

We next come to Uctred de Strickland, the second son of Ketel (I) son of Dolfin, upon whom his father seems to have settled the family's lands in the Barony of Kendal, including the Manor of Great Strickland. "Uctred de Stirkeland" occurs in the Westmorland Pipe Roll of 5 Richard I (1194), and again in a Lowther deed of the same period. In the *Register of St. Bees* we find Uctred son of Ketel together with Alan son of Ketel, Gospatric son of Orm, and Thomas his son witnessing a charter from a certain Adam, son of Uctred, to Beatrice his niece, of five oxgangs of land given her by William, son of Liulf, his nephew.

It would appear that Uctred, son of Ketel, son of Dolfin, died before 1208 leaving no male issue. But there were two

daughters and co-heiresses—Christian, wife of Walter Fitz-Adam, and Sigrid, widow of Maldred. The latter figures in a suit of claim in 1200; and in 1208 an agreement touching two bovates of land in “Stirkeland” was made between Sigrid and Gilbert de Lancaster, a grandson of the William de Lancaster who first granted the fief of Great Strickland, etc., to Ketel, son of Dolfín.

At Midsummer 1208 Walter de Strickland and Christian, his wife, made a final settlement with Sigrid whereby Walter and Christian acknowledged a carucate of land in “Stircland” to be the right of the said Sigrid to hold (as tenant) of them and the heirs of Christian by the free service of an annual render of 2s. In return Sigrid granted them all her land “from Aspelgile to Groshousie and from Groshousie to Bounwath” with remainder to Christian and her heirs. It will be noticed that the emphasis is on her heirs, not Walter’s; for he, of course, enjoyed the lordship of Great Strickland, etc., by right of his wife.

In 1291, Sir William de Strickland, Walter and Christian’s great-grandson, claimed against William de Burgh for further property at Middleton-in-Lonsdale “which Christian de Leteham, his great-grandmother, whose heir he is, held on the day of her death.”

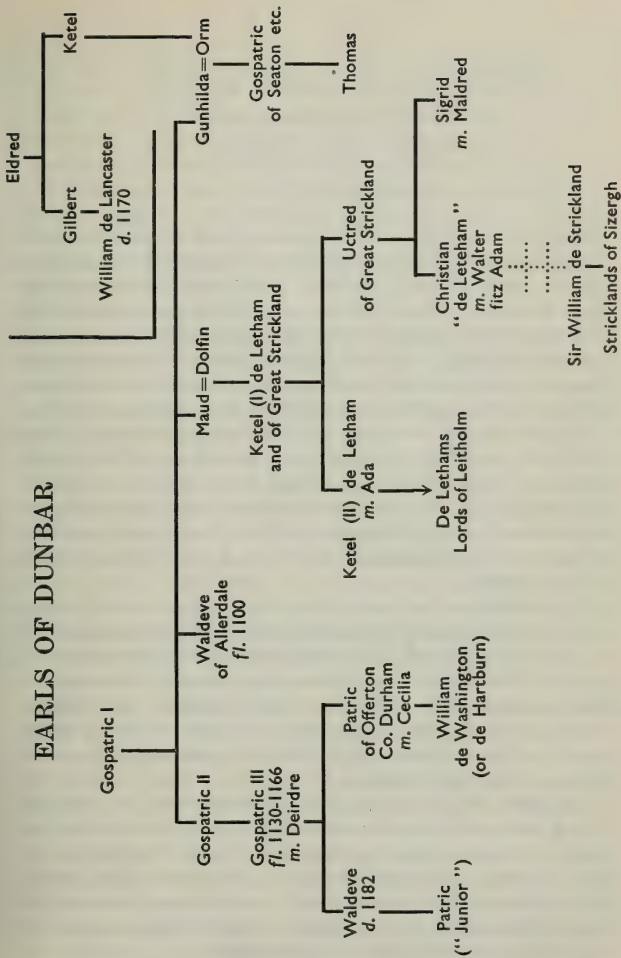
POSTSCRIPT. I have purposely refrained from giving “chapter and verse” for the deeds, charters, etc., mentioned above, but all the authorities from whom he has quoted are fully given by Mr. Washington in his article, as printed in *C. and W. Transactions*.

My other editorial effort has been to make out, as far as I am able, a genealogical table which should help to clarify the relationships of the various Ketels and Gospatrics. I cannot guarantee the accuracy of the pedigree in every respect: for example, it is pure guesswork on my part that the first three Gospatrics in the Earldom of Dunbar were respectively father, son, and grandson.

Of particular interest to Berwickshire folk is the fact that the name of Ketel, the earliest recorded Lord of Leitholm survives to this day in Kettleshiel, which lies between Duns and Westruther.

R.D.-H.

EARLS OF DUNBAR



THE WORK OF ROBERT ADAM IN NORTHUMBERLAND.

By W. RYLE ELLIOT.

Reprinted from *Archaeologia Aeliana*, 4th Series, Vol. XXX.

At the present time there is much unnecessary talk of "Good Taste," "The Georgian Era" and of the perfection of the "Age of Adam." What "good taste" is, is a matter for conjecture. The social and political development of centuries sweeps away with it the culture and good taste of a previous age. Although it is difficult to determine just where one era ends and another begins, there is ever a constant transition, a casting off the old, and in time an adoption of the old to suit the new. At the commencement of the eighteenth century, life continued much as it had done during the past fifty years. There were innovations in all branches of art, music and architecture, but in general there was slowness to adopt the new forms. Money was certainly beginning to circulate more freely, and vast fortunes were yet to be made.

In Northumberland and the North, people were even more conservative, for them the period of turmoil and stress lay not so far behind, and there were still doubts and suspicions. Structural changes were slow; possibly because the great landowners in the north also possessed vast estates nearer the court, when they were already rebuilding their houses in the new mode, and their more northern territories were apt to be neglected.

The Scots, on the other hand, having been isolated for so long, had rushed southwards in force after the union of the crowns, returning full of enthusiasm, their wits sharpened, their manners vastly improved, to live a new life in the latest fashion. Their estates were modernized, and the old houses pulled down and replaced by more elegant structures designed by the most fashionable architects.

It was not until the mid-eighteenth century that the English landed gentry began to trek northwards to re-model

and rebuild their decaying and often derelict properties. At this period there was an awareness that the north was neither bleak nor grim, that the possibilities of developing and beautifying were great. Above all, there was a further opportunity of lavishing their ever increasing wealth, in the "good taste" already established in the south.

In Scotland things were progressing far in advance of northern England, the returning Scots were filled with the delights of the civilized south. William Adam was already a successful architect and builder in Edinburgh—an assistant to Sir William Bruce. Not only was he a successful architect but, more important, a successful and established business man. His sons, therefore, began life with every monetary and social advantage. Of his four sons Robert proved to be the most famous, and the best remembered. One must not forget, however, that his success was largely due to the perseverance and good sense of his three brothers ; a fact which is not now fully appreciated.

Little is recorded of Robert Adam's early days. He was a school fellow at Kirkcaldy of Adam Smith, of subsequent *Wealth of Nations* fame. At an early age he showed his artistic prowess, and in the Soane Museum there is a sketch by him dated 1744, when he was sixteen years of age. It depicts a tower and bridge with a river, trees, and cattle in the foreground. Delightfully drawn, in it one can see traces of a certain type of work executed by him at a later date like the roof and crenelations at Fowberry Tower.

Like many wealthy young men of his time, he was sent abroad on the Grand Tour. This journey started early in 1754 ; whilst travelling through France he had the good fortune to meet, and to form a friendship with, Charles-Louis Clerisseau, an architect and engraver, the publisher of *Antiquities de France* and the more important work, *Monuments de Nimes*. Clerisseau was some years older than Robert Adam, and it has been suggested by many people that he was Adam's tutor. This was not so, they were merely good friends, but Robert Adam was not insensible to the skill and draughtsmanship of his companion. On his return to England he was accompanied by Clerisseau, when the latter produced his famous *Ruins of Spalatro* drawings.

Possibly this was the first classical influence on Robert Adam. Journeying slowly through Italy, he had the good fortune to meet Giambattista Piranesi, one of the best and most famous draughtsmen and engravers of architecture and ancient ruins of his time—referred to repeatedly as the “Rembrandt of Architecture.” Piranesi’s most remembered, and possibly greatest, work is a two-volumed edition published in 1778. *Vasi, Candalebri, Cippi, Sarcofagi, Tripodi, Lucerne, ed Ornamenti Antichi*.

It is easily seen on studying the works of both Clerisseau and Piranesi the great influence that these two people had on Robert Adam. To them I think we owe entirely the style that was adopted by Adam. A young Scot, eager to learn, and receptive of new ideas, could scarcely help but be impressed by the ideas and works of these already well-known men. Ruins and Classicisms were the fashion, so ruins and classicism it should be. The *Ruins of the Palace of the Emperor Diocletian* was not the cradle of the Adam theme, but rather the friendship and influence of Charles-Louis Clerisseau and Giambattista Piranesi.

The Grand Tour was gradually completed. In Edinburgh the work of the firm of William Adam and Sons was in full swing, and Robert returned to his family to begin work in earnest.

It is a lamentable fact that amongst all the notable achievements of this celebrated architect so little was built, and so little remains, in Northumberland. A few miles away on the other side of the Border, there is still much to be seen : Mellerstain, Paxton, the interior of Wedderburn Castle, and until recently Smeaton Heburn. These are only a few, for dotted all over Scotland are fine examples of his buildings. Even more regrettable is the fact that what he did achieve in Northumberland was ruthlessly destroyed during the nineteenth century. Certainly there were never any houses to compare with the glories of Syon, of Osterley Park, or of Hume House in London, but what he did design was, in spite of general controversy, extremely beautiful and suitable to the natural surroundings of the northern countryside.

About 1760 there were designs for the interior of FORD

CASTLE. Little is known of these save that they were in the revived Gothic style. Nothing remains of the interior work, it was destroyed when the castle was inherited and modernized by the Waterford family. What Louisa, Marchioness of Waterford, with all her artistic perception, could have been thinking about, one can only wonder.

The most important work of Robert Adam in Northumberland was, of course, ALNWICK CASTLE. This was commissioned by the first Duke of Northumberland about 1755. The date is a little uncertain, but he commenced to "re-organize his estates" in 1750. The castle was then more or less a ruin, and judging by Canaletto's painting of it in 1757 it was still in a deplorably ruinous condition.

When the work was commenced the towers facing the keep were rebuilt and united with one another by curtain walls and passages. The old banqueting hall remained the dining-room, and the ancient kitchens were turned into a state drawing-room. Private apartments for the Duke and Duchess were built at the southern side of the keep, whilst the western side was converted into state bedrooms.

The main entrance to the keep was on the north-western side of the inner ward, this led through a hall, to a fan-shaped staircase ascending to an upper hall and a suite of state reception rooms. The ground floor consisted mainly of servants' quarters, but an oval staircase at the south-west corner of the inner ward led to the private apartments of the Duke and Duchess.

The buildings within the inner and outer baileys were removed in 1755, and the ruinous curtain walls and towers were restored. A small building south of the barbican was rebuilt, and is now called the tower. The tower at the corner of the southern and western sides of the outer bailey was pulled down and replaced by the present clock tower.

The castle must have been completed round about 1764-1765. In a bottle found in the walls a note carries this wording, "The Castle was built by Mathew and Thomas Mills, Master Masons. In the year 1764."

These Mills brothers must have been diligent and successful builders at this period. They built many houses in Northumberland. Belford—the "James Paine town"—was

built by the same firm.

Of the interior decoration of the castle much has been said and, in general, dismissed as sham, shoddy and trivial. It was certainly not in the familiar Adam tradition—but when one takes into account that the Duke was already involved in a “higher Classicism” at Syon, it is only natural that the decoration of Alnwick should be different. Executed in the then fashionable “High Gothic” manner, it must have been a thing of romantic beauty. Why people should condemn this Gothic style I do not know. It was a revival of a bygone age, and surely no more vulgar than the revival of the Classical manner; certainly no more vulgar than the faithful following of the “Georgian style” at the present day. The eighteenth-century Gothic revival had lightness, grace, colour, and though I hate to use such a word, “movement.”

At Alnwick were all these things. From contemporary writers the fan-shaped staircase was one of the finest in England, the design being repeated across the ceiling and cornices. Sketches in the Soane Museum Collection show a great deal of lightness, and certainly no sense of the bizarre, although to our modern eye perhaps a trifle over ornamented. When one realizes, however, that it was delicate plaster work, and not heavy stone or woodwork, it is easy to picture the great charm of the rooms. There is a drawing of the Grand Salon by Charlotte Florentia Duchess of Northumberland, which possibly portrays better than any diagrams just what it appeared after completion. The style of decoration is said to be the wish of the first Duchess and not of the Duke. She is reputed to have been a lady of flamboyant taste and manners, yet in *Diaries of a Duchess* there is little to bear this out. A bold and indefatigable traveller, full of resource and charm, she has so little to say of either Alnwick or Syon that the charge of ostentation can hardly be laid at her door.

In a “Design for a Gateway” (plate III, fig. 2) the general style and effect can be readily seen. There is nothing overdone and it is possibly one of the most charming of Robert Adam’s Gothic designs.

The Lion Bridge still stands and can be seen by all. One

is often asked "Where is the other lion?" There is only one Percy Lion—but had another been placed the effect from most angles would have been confusing and the purity of line would have been lost.

Inside the castle there are still to be found original chimney pieces. In the stewards' hall, now part of the ladies' college, is a beautifully executed piece carved in stone with restrained Gothic decoration. Smaller ones, also in stone, are to be found in some of the students' bedrooms. These are unique in their delicacy of design, the more so being carved in stone.

Perhaps the most notable is the chimney piece (plate III, fig. 1) removed from the drawing-room and now in the house-keeper's room. Of the many Adam chimney pieces I have seen throughout the country, this for delicacy and restraint in decoration is one of the loveliest. It is carried out in statuary marble, inlaid with yellow convent sienna marble.

There is still a great deal of the original furniture designed by Robert Adam, and executed by Chippendale, in the castle. The finest pieces are connected with the first Duke. Robert Adam speaks of "his extensive knowledge and correct taste in architecture," and who "brought classic example and modern needs to a natural consistency, a constant encourager of literature, and the polite Arts." In a manuscript survey in 1785 there are described "Two elegant card tables, of inlaid woods lined with green cloth, the ornaments, of ormulu. Elegant Pembroke tables of inlaid wood with ormulu enrichments." Two of these tables still remain, one has a top veneered with satinwood and inlaid. The *guttae* beneath the frieze are of brass, another is similar, but has a folding top instead of Pembroke-end flaps.

In the red drawing-room is a magnificent suite of furniture, upholstered in crimson damask. This suite consists of a sofa, ten armchairs, and four stools. The tapered cylindrical legs are spirally fluted and the frames are richly carved with a foliate scroll and leaves. This suite of furniture compares favourably with a similar suite at Kedleston. It is more restrained in design, and less overpowering in size. Most of Chippendale's furniture was of mahogany enriched with gilding or ormulu, which showed to advantage the colour and beautiful figuring of the wood. Much, however,

was completely painted or gilded, especially the frames of settees and chairs, torcheres and pedestals. The severeness of the lines of Robert Adam's designs called for the general enlivenment of gilt and painted decoration. The excellency of the construction of Chippendale's furniture is beyond doubt—to have had the experience of taking to pieces and reassembling a gilt chair designed by Robert Adam and made by Thomas Chippendale convinces one of the unseen craftsmanship, equally important as the carved and gilt exterior.

Possibly the most important pieces of Adam's design in the north are a pair of gilt pedestals (plate IV, fig. 2). The designs for these are in the Soane Museum, and are dated 1776. These in all probability stood on either side of the drawing-room chimney piece. They are triangular in form, faced on the upper angles by rams' heads. The lower angles are supported by *monopodia*, which rest on a platform supported by three sphynxes, which rest on a triangular plinth.

Two other pieces of great interest are the chair and reading desk (plate IV, figs. 1 and 3) designed for the chapel. These are in the Gothic style, or as Peter Waddels described it, as the "Antique Gothic form." They are painted white and have gold enrichments. There is also a writing table with baize-covered top, the frieze and tablet inlaid with the Vitruvian scroll, and with crossed palm branches. The legs are of rosewood, mounted with festoons of husks in gilt brass. Another mahogany table has a frieze inlaid with the Athenium, the squares above the legs and the upper portion of the legs mounted with a pattern of gilt brass and festoons of husks. This is dated 1775.

In Peter Waddel's description of Alnwick 1785 he notes that in the library "a small billiard table, for the entertainment of those who may wish to relax from the more serious studies to which it is peculiarly adapted." This table, though no longer in the library, is still within the castle.

We cannot but be grateful that these treasures still remain with us in Northumberland and, though few in number, compare favourably with anything elsewhere.

An enormous sum of money was spent on the rebuilding and embellishment of Alnwick Castle, a sum which amounted to



Fig. 2. Archway designed for Alnwick Castle by Robert Adam.



Fig. 1. Fireplace designed for Alnwick Castle by Robert Adam.
Copyright *Country Life*.

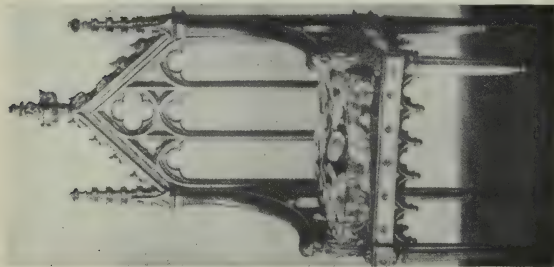


Fig. 1.

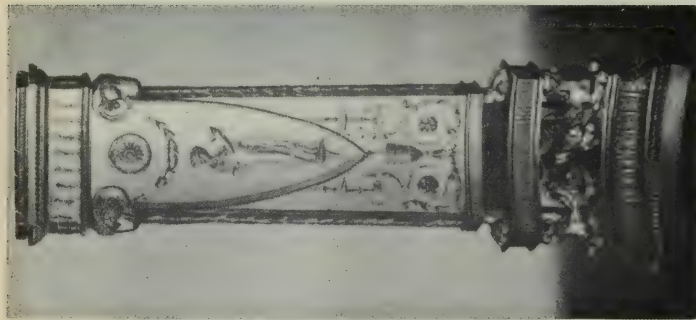


Fig. 2.

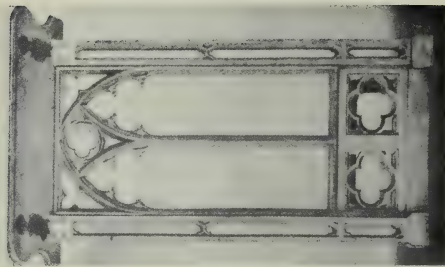
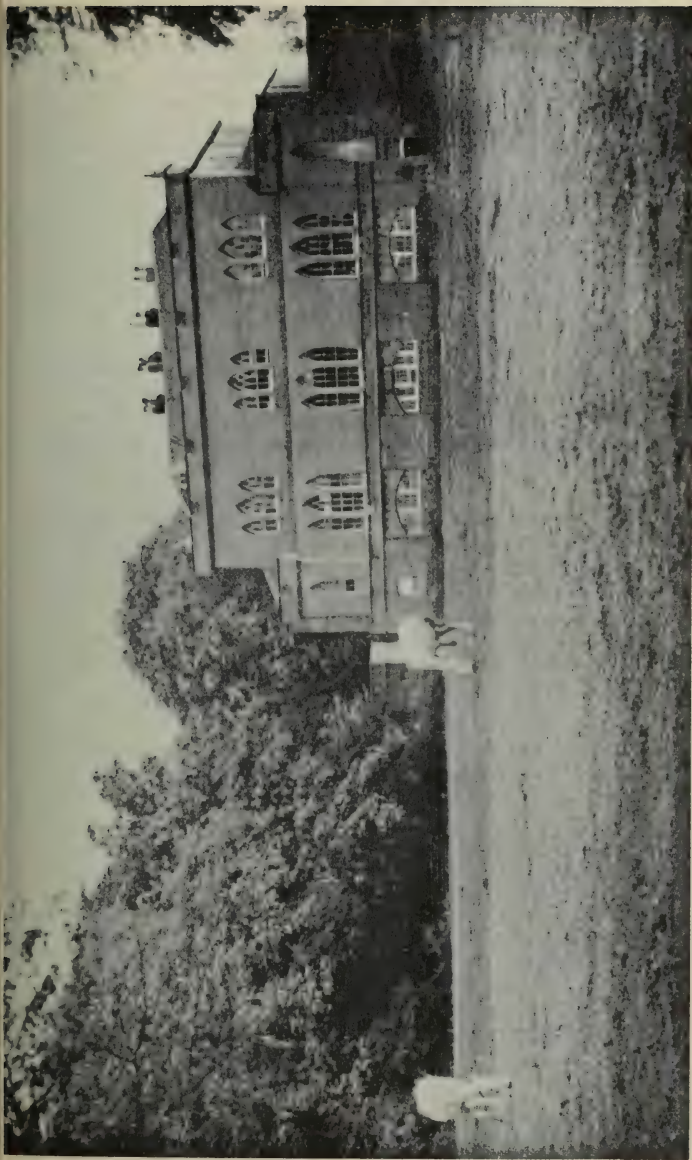


Fig. 3.

Chair, Pedestal and Reading Desk at Alnwick Castle designed by Robert Adam.

Copyright Country Life.



Fowberry Tower—North Front.

From photograph by W. F. T. Pinkney.

between £70,000 and £80,000. Yet the greater portion of this work of art was to be destroyed in less than a hundred years when the Fourth Duke Algernon directed Signors Salvin and Canina to redecorate the interior in 1854. There are in existence many contemporary prints and engravings of the exterior of the castle, after the 1760 restoration. Most notable are :

"Alnwick Castle "	S. C. Godfrey	engraved Blyth 1776
" "	William Hall	" James Kerr
" "	Turner	" Willmore
" "	Neale	" Radcliffe
" "	"	" Rode
" "	S. Hooper	dated 1776

and many others.

Before leaving Alnwick a word must be said of the tea house or gazebo on Ratcheugh Crag. This sham ruin is built from an Adam design, and save for the re-glazing of the windows and new window sashes is comparatively unspoilt. It is typical of its period, and still contains a rather beautiful cornice of fan tracing in plaster-work.

There are in Alnwick town itself several houses, built at the same time as the castle. Whilst we cannot say they are the work of Robert Adam, they are no doubt modifications of the "Adam plan." The builders of the eighteenth century were ever ready to copy and adapt from the plan of the architect engaged in building the "Great House."

SHAWDON HALL

Perhaps the most typically "Adam" of all Northumbrian country houses, it was built in his later and grander style. The ceilings and chimney pieces are of great beauty. Except for additions, it has survived in a remarkable manner. Unfortunately, owing to the illness and death of Mr. Bevan, I have not been able to do much practical work at this house, but hope to make a complete survey of it at a later date.

FOWBERRY TOWER.

There is a great deal of controversy about this house. Its reconstruction during the second half of the eighteenth century has been ascribed to numerous architects. To Wyatt, Paine or Carr, and ludicrously enough said to have

been a minor folly of Vanburgh himself, the latter is possibly a legend growing round the family connection between the Blakes and the Delavals. However, there are little visible signs of the work or designs of any of these men.

I myself consider it to be, save for the refacing of the south front and minor alterations, one of the most unspoilt smaller country houses in Northumberland. By careful comparison with the greater and lesser works of Robert Adam throughout England and Scotland, it would seem that his hand had something to do with its construction. Possibly during the building of Alnwick and Shawdon Hall Robert Adam would certainly meet the Blakes, and no doubt occasionally passed through Chatton. It is more than likely that his advice would be asked and his designs and sketches used.

Internally it has many features, though naturally on a more modest scale, similar to Mellerstain in Berwickshire and to Culzean Castle in Ayrshire. The whole style of decoration, and plan, seems to be Adam.

Most of the interior is in a delightful Gothic style—the door frames and the doors themselves being particularly fine—these are similar to many at Culzean Castle. The entrance hall, library and boudoir are simple and restrained, with little or no decoration save for a Greek motif cornice, in the two last-mentioned rooms. Both these rooms are identical with the upper chambers in the houses on the north side of Charlotte Square, Edinburgh (1791).

There is a central corridor through the entire building which at one time terminated in side entrances, these having been re-modelled at a later date. Near the east end of the corridor in a recess is the main staircase, extremely unpretentious, but with a beautiful and elaborate plaster cornice and ceiling, the fan design as at Alnwick and shown in the Soane Museum Collection of sketches and diagrams. The upper corridor corresponds with that below, and the rooms on this floor have the same restraint and simplicity of style. In one of the bedrooms is a finely carved chimney piece in stone, contemporary in date and design to those mentioned in the bedrooms at Alnwick Castle.

On the north side of the lower corridor are the two principal

rooms, a dining-room and a salon. The dining-room is in perfect proportion and has a fine chimney piece, simple in design and decoration, of red, and probably beneath its paintwork, white statuary marble. The cornice mouldings are delicate, Grecian in design, but contain the "bird" motif, from the crest of the Blake family. Unfortunately the full beauty of the room is somewhat obscured by the dark paintwork of a later day. Over the pointed three-light window is a contemporary gilt pelmet of Gothic form. At the south end of the room are two pillars supporting the upper floor. Originally the corridor was here, but the wall was removed and replaced by pillars, thus enlarging the room and making it possible to have recesses for a side table and a service lift from the vaulted kitchen beneath.

The salon is, without doubt, the most elaborate room in the house; both it and the dining-room are extremely lofty and occupy the space of two floors. It is perfectly proportioned. The pointed, three-light window is recessed, and the massive pelmet in gilt is similar to that in the dining-room. On the opposite wall is a doubtless Robert Adam chimney piece worked in white statuary marble with sienna marble enrichments, the delicately carved entablature depicts the worshipping of the goddess Pomona. Possibly this is the work of Joseph Wilton. On either side are doors leading to the corridor, both are Gothic, and have architraves painted white and enriched with gilding, the design is taken from the famous doorway of the "House of Tristan L'Hermite" at Tours; no doubt visited by Robert Adam in his journey through France. The cornice is in a fairly bold style, as is the ceiling, and similar to one at Mellerstain. The whole effect of the room is of great beauty, the proportions, the decorations and the immense amount of light, make it one of the most charming rooms in the north country.

The exterior of the building is extremely interesting, especially the north elevation. The south front has been re-faced. On the north there is much more of the Scottish feeling of Adam, and it has certain features adapted from his designs for "The Oakes" in Surrey. The masonry is slightly rusticated, and the lower portion has the same constructional theme as is seen at Edinburgh University, a fact

which should not be overlooked. The pointed Gothic windows are unusual in their size, but form a perfectly symmetrical plan.

There is a decorated string course running along the upper portion of this north front, similar to that at Culzean Castle, and in the sketch for "The Oakes," as well as being almost identical with that shown in a sketch drawn by Robert Adam in 1744. The whole is surmounted with a battlemented parapet, corresponding with the parapets of Mellerstain and Culzean.

Because of the many similarities, one feels that here at Fowberry, Robert Adam at least had a hand in its design, and one can only hope that future generations will not attempt to destroy any feature of this unusually beautiful and decorative house.

I am greatly indebted to the Duke of Northumberland, the late Earl of Home, Mr. and Mrs. Milburn of Fowberry Tower and the late Mr. Bevan of Shawdon Hall. Also to the editor of *Country Life* for permission to reproduce the photographs of Adam treasures at Alnwick, and to Mr. W. F. T. Pinkney for photograph of Fowberry Tower.

THE SAME WITH A DIFFERENCE

By ALEXANDER BUIST.

Reprinted from *The Scots Magazine*.

Up to quite recently my interest in the Ba' Game was a general one, mainly, perhaps, because Kelso has never possessed its own particular version. And then things took an unexpected personal turn. While on holiday in the northern islands in May, 1959, my wife handed in a pair of shoes for repair to Councillor James Harrison, of Kirkwall. In the course of conversation, Mr. Harrison happened to mention that his business included the official post of hand ba' maker to his native city, and that his own part in the game had been abruptly terminated by severe rib injuries received some years before. Later there followed a long letter from Kirkwall's Provost Scott giving graphic and interesting details of the local "edition," and just the other day, our lately retired and worthy Provost of Kelso, himself an Orcadian, has further confirmed that this historic encounter is not confined to the mainland, with his kind permission to reproduce a photograph in evidence.

Like its better-known counterpart at Jedburgh, the beginnings of the Orkney version are wrapped in obscurity: some give it a Viking origin, which is only to say, "as old as you care to make it." The chief differences in the island game—it also has no set rules—are in the size and constituents of the ball; the fact that only one is used throughout a game; the unusual location of the "Doonies" goal in the Inner Harbour or Basin; the method of awarding the ball used in the game, when all is over; and the dates on which the game is played.

This ball is much larger than the Jedburgh cricket-ball type; of leather, like a small "soccer" ball, stuffed with wood shavings, and with alternate panels painted black. A century or more ago, it progressed by kicking, but nowadays, as in the Borders, it is "smiggled," or otherwise conveyed by

hand. If several players dispute the scoring of a goal, they appear, I am told, before a neutral arbiter, for example, the captain of a ship visiting the port, who has to decide by the volume of applause greeting the name of each player as it is called out, which claimant is successful. The award of the ball used in the game is made to a player on the winning side chosen by his fellows for his record of play over the years. The Kirkwall game is now played on *both* Christmas and New Year's Days, by men, and by boys under 15; that is, two games each. Whether these seasons have been chosen by virtue of purely traditional associations, as with Candlemas and Fastern's E'en, I have not been able to discover.

The bodily compression, hard knocks, mutilation of clothing, and barricading of shops and houses in the immediate vicinity of the contest, are common to Borderers and islanders. Of the Jedburgh variant, it is said that the police are not disposed to intervene except in the case of a fatal casualty, which, so far, fortunately, has not materialised. But in Kirkwall in bygone days, a certain Sheriff, in the interests of law and order, issued an edict abolishing the game. By way of reply, the attendances on its next occasion were larger than ever! A high local official, guarding a narrow street entrance, was approached by His Lordship, who there and then threatened him with imprisonment. Whereupon the Town Clerk, shouting, "You'll need to put us *all* in jail," plunged joyfully into the heart of the fray, emerging later minus a coat-tail. Since when, no further attempts at interference or intimidation have been made.

In these days of transfers, overspill, increases and re-distributions of population, historic local survivals, whether taking place at Kirkwall, Jedburgh, or one or other of the smaller Border towns which still retain this particular tradition, are fast becoming unrepresentative. Ours is a restless age, and there seems little leisure for reflection on the origins of what are now commonplaces. Also, as things are, it takes much less than a Ba' Game to initiate a rough house.

All the same, for the less apathetic minority, a little speculation seems here quite justified, and the second volume of Miss Marian McNeill's "Silver Bough," "A Calendar of Scottish National Festivals from Candlemas to Harvest

Home," would suggest at least one line of approach. The whole series is, indeed, a masterpiece of immense and highly concentrated research, and shows unusual evocative powers.

Of the Fire Festival of Beltane, which every first of May celebrated the coming of summer, Miss McNeill has this to say : " On the eve of Beltane, all the domestic fires, which had burned day and night for a twelvemonth, were extinguished. Long before dawn, shadowy figures began to emerge from the doorway of each heather-thatched hut, and presently a long procession of men, women and children started to mount the steep hillside—each family leading or driving before it all its domestic animals—to the spot sanctified by centuries of worship. The ceremonies were directed by the white-robed Druids By primitive peoples, the Sun was regarded as the male principle by which the Earth, or female principle, was fertilised, and the whole festival may be likened to a wedding ceremony where the bride, the Earth, welcomes her lover, the Sun, through whose embrace she shall produce abundance of corn, cattle and men."

And again she writes : " Each bonfire (to which was to be applied the sacred, virgin flame) was built in two sections with a narrow passage between, and around it was cut a circular trench (symbolic of the Sun) of sufficient circumference to hold the assembled multitude." It was a time of propitiation and purgation.

On this analogy, it may not appear too fanciful a theory that the origins of the Ba' Game go back much further than (in the case of Jedburgh) the head of the convenient English prisoner, and the Catholic " feast before the (Lenten) fast," to pagan days of " the first spring light " (the new moon), with the throwing up of the ball as her uprising and the ribbons attached to it (Jedburgh once more) the streamers from her rays. From its shape alone, where, one may ask, does the symbolism of the ball in *any* ball game begin and end ?

The problems faced by primitive man in his struggle for bare existence against unknown and hostile natural elements are, only too obviously, complicated a million-fold by the advance of modern science. The gods man now reveres are still of his own creation, but they, once unleashed, will wholly

ignore appeasement. For the benefit, for the very survival, of civilisation, he must, while there is time, abjure the delusions of world power; those "wicked enchantments" regarded by his early ancestors as direct suggestions of the personified forces of evil.

Author's Note. Acknowledgements are made to the publishers for permission to quote from *The Silver Bough*, Volume II, by F. Marian McNeill (Maclellan 1959).

ENTOMOLOGICAL AND ORNITHOLOGICAL NOTES.

Observations by A. M. PORTEOUS during 1960.

ENTOMOLOGY.

Convolvulus Hawk Moth (*H. convolvuli*). Late September.
One, Kelso.

ORNITHOLOGY.

Black Tern. One seen by R. Patterson for the third year running, at the end of September, at Sprouston water.

Whinchat. Seen in Spring at Kincham Wood Hirsell, where *Stonechats* were seen in 1959.

Buzzard. Three shot, all within six miles of Coldstream, others reported still present.

Scaup and Longtailed Duck. Reported on Junction Water, Kelso, by J. Davidson, December 31st.

Gadwall. A single drake on Hirsell Loch on September 18th.

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part IV.

By A. G. LONG, M.Sc., F.R.E.S.

SUPER-FAMILY AGROTIDES.

Family CARADRINIDAE.

86. *Colocasia coryli* Linn. Nut-tree Tussock. 200.

- 1895 Foulden Hag, larvæ on beech, birch, plum, sawall (G. Bolam, *H.B.N.C.*, Vol. XV, p. 297).
1913 St. Abb's Lighthouse, one male at beginning of July, much worn (W. Evans, *Scot. Nat.*, 1913, p. 230 ; and G. Bolam, *H.B.N.C.*, Vol. XXVII, p. 261).
1925 Often overlooked, Foulden Hag and Edington Hill. Renton got it at Fans (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 559).
1952 Gavinton, two at street lamps, May 17 and 19 (A.G.L. *H.B.N.C.*, Vol. XXXII, p. 184).
1953 Gordon Moss, one larva on birch, August 6 ; Kyles Hill, about twenty larvæ on birch, August 8 (A.G.L.).
1954 Bell Wood above Cranshaws, and Gordon Moss—several larvæ, August 7 and 12 (A.G.L.).
1955 Gordon Moss, one imago at m.v. light, April 29 (A.G.L.).
1956 Gordon Moss, several at m.v. light, May 2-June 21 (A.G.L. and E. C. Pelham-Clinton) ; Hirsell, several, May 8-June 15 ; Kyles Hill, several, May 23-June 21 ; Retreat, June 7 ; Gavinton, June 23 (A.G.L.).

Summary.—Well distributed and fairly common in suitably wooded districts. The imagines start to emerge about the end of April and continue until about the end of June—single brooded. Larvæ are readily found by beating birches in August. The imagines come well to m.v. light.

87. *Episema caeruleocephala* Linn.

Figure of Eight. 201.

- 1874 Blackadder Woods (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
 1876 Ayton Castle, one at light (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
 1877 Threburnford, four (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1925 "Buglass found a hedge at Ayton covered with larvæ in 1877." (G. Bolam, *H.B.N.C.*, Vol. XXV, p. 573).
 1949 Preston Schoolhouse, one at lighted window, October 6 (A.G.L.).
 1952 Gavinton, several at street lamps, October 14-21 (A.G.L.).
 1953 Gavinton, several, October 2-8 (A.G.L.).
 1954 Gavinton, one, October 14 (A.G.L.).
 1955 Gavinton, one, November 4 (A.G.L.).
 1956 Gordon Moss, one at m.v. light, September 22 (E. C. Pelham-Clinton).
 1958 Birgham House, at m.v. light, October 16 (Grace A. Elliot).
 1959 Birgham House, September 25 (Grace A. Elliot); Gavinton, October 3 and 6 (A.G.L.).

Summary.—Widely distributed, emerges about the end of September flying throughout October into November.

88. *Apatele leporina* Linn. Miller. 203.

- 1873 Duns Law, by D. Paterson a Duns cobbler (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
 1953 Gordon Moss, two larvæ on small birches on railway side, August 6; Lees Cleugh, two larvæ on birch, August 8; Kyles Hill, one larva on birch, August 16 (A.G.L.).
 1954 Gordon Moss, one imago at sugar, June 27 (E. C. Pelham-Clinton); twelve larvæ beaten from birches August 4 and 12 (A.G.L.).

- 1955 Gordon Moss, two imagines at sugar June 24 and two on July 4 (A.G.L.).
- 1956 Two imagines emerged after two winters in pupæ, June 23 and July 3 (A.G.L.); Gordon Moss, two at m.v. light June 11 (E. C. Pelham-Clinton).

Summary.—Widely distributed where birches grow but not common. The larvæ have long silky yellowish hairs and can be beaten from birches in August, they pupate in rotten wood or moss and may pass two winters in the pupal stage. The imagines emerge in the second half of June or in early July and visit both sugar and light.

*89. *Apatele megacephala* Fabr. Poplar Dagger. 205.

- 1876 Eyemouth, one from pupa near poplar (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1876 Preston, one bred from larva obtained by C. Watts (S. Buglass, *ibid.*, p. 127).
- 1927 Apparently very local (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 138).

Summary.—We have no further records of this species which occurs all over Britain up to the Highlands and is often common in the larval stage on poplars in City suburbs. Perhaps the recent planting of poplars in many parts of Berwickshire will lead to its increase.

[*Apatele tridens* Schiff. Dark Dagger. 208.

- 1877 Threeburnford, several (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
- 1927 Shaw thought that he got it at Eyemouth. In *The Entomologist* for 1903 Mr. W. Renton refers to having bred two imagines from three larvæ obtained near Kelso (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 138).

Summary.—As yet we have no authentic record of this species from Berwickshire. The species can only be distinguished from *A. psi* by examination of the genitalia or by rearing from the larva which is distinctive. I have prepared

genitalia mounts of twenty specimens which all proved to be *psi* although some were quite dark. Renton's record for Roxburghshire suggests that *tridens* should be in Berwickshire but Baron de Worms states that "it only ranges up to the Midlands" (London Naturalist, 1954, p. 68). Both Meyrick and South, however, record it for Scotland.]

90. *Apatele psi* Linn. Grey Dagger. 209.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Preston, one July 16 (J. Anderson, *ibid.* p. 231);
 Broomhouse, one (A. Anderson, *ibid.* p. 232);
 Eyemouth, at sugar (W. Shaw, *ibid.* p. 235).
 1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 303).
 1927 Generally abundant, some very dark varieties (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 139).
 1945 Above Polwarth, July 9.
 1952 Near Polwarth, June 5; Gavinton, a pair *in cop.* near a street lamp, June 15; Greenlaw Moor, one on tree trunk, June 26; near Grantshouse, one larva, August 21; Gavinton, one larva, August 28; another in Langton Estate, October 19.
 1953 Gavinton, imagines at light July 10 and August 8; Gordon Moss, larva on birch, August 12, another larva on apple at Gavinton, August 30.
 1955 Gordon Moss, at sugar, June 24 and July 4; Gavinton, four at light, July 5-August 1.
 1956 Retreat, Gavinton, Bell Wood, Linkum Bay, Nab Dean, Hirsell, fourteen at m.v. light; June 7-August 1.
 1957 One emerged from pupa June 26; Gordon Moss, one, July 7 (E. C. Pelham-Clinton).
 1958 Scotstoun near Duns, July 16.
 1959 Gavinton, four, July 15-24; one larva pupated on September 20; Birgham House, three, July 22-August 12 (Grace A. Elliot).
 1960 Hutton Bridge, one on oak trunk, June 4; Gavinton, June 25.

Summary.—Widely distributed and common, some dark specimens occur, particularly at the coast. It has rather a

long period of emergence from the first week in June, through July into August. Often found at rest on tree trunks. Larvæ in August to October on birch, hawthorn, apple.

*91. *Apatele menyanthidis* View. Light Knot-grass. 211.

- 1877 Threeburnford, larvæ plentiful last season (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1902 Lammerlaw: heaths. Larva at Lauder Woodheads (A. Kelly in *Lauder and Lauderdale*, p. 304).
 1927 On most moors on both sides of the Border. In 1892 one larva on a small willow near Fast Castle (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 139).

Summary.—We have no recent records of this moorland species in Berwickshire. The larva feeds by day on heather in August and September, the imago flies in June-July.

92. *Apatele rumicis* Linn. Knot Grass. 214.

- 1843 Near Pease Bridge by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).
 1874 One from larva, Preston (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231); Broomhouse, from larva (A. Anderson, *ibid.* p. 232); Eyemouth; larvæ common on *Cnicus arvensis* on sea banks, (W. Shaw, *ibid.* p. 235).
 1877 Threeburnford, two (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1897 Coldingham, larva (G. Bolam, *H.B.N.C.*, Vol. XVI, p. 163).
 1902 Lauderdale; larvæ easily seen (A. Kelly, in *Lauder and Lauderdale*, p. 304).
 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 139).
 1951 Pease Bay, one imago at sugar June 16; Gordon Moss, several at sugar, June 30 (E. C. Pelham-Clinton); larva on wild rose in September (A.G.L.).
 1952 Gavinton, at light and sugar, May 21 and June 1 (A.G.L.); Gordon Moss, a few at sugar, June 14 (E. C. Pelham-Clinton).

- 1953 Gavinton, several at light, May 22-June 26 ; Lees Cleugh, one larva on thistle, August 28.
- 1954 One emerged from pupa, June 16 (A.G.L.) ; Gordon Moss, several, June 27 (E. C. Pelham-Clinton) ; Gavinton, one at light, July 4 ; Gordon Moss, one larva on birch, August 12, three on *Salix*, September 26 (A.G.L. and E. C. Pelham-Clinton) ; Kyles Hill, one larva on heather, August 24.
- 1955 Kyles Hill, Retreat, Oxendean, Penmanshiel Moss, Gordon Moss, several at m.v. light and sugar ; May 24-July 18 (A.G.L. and E. C. Pelham-Clinton). Also second brood specimens at Gavinton, August 13 and 25, and at Gordon Moss, August 26 (A.G.L.).
- 1956 Duns, Linkum Bay, Bell Wood, Gavinton, Gordon Moss, several at m.v. light and sugar ; May 8-July 14 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gordon Moss, several at sugar, June 8 (E. C. Pelham-Clinton) ; Gavinton, July 8.
- 1958 Langton Mill, one larva, September 6 ; Duns, one larva September 11.
- 1959 Birgham House, imagines, August 2 and September 22 (Grace A. Elliot).
- 1960 Gavinton, June 22 and 25 ; Birgham House, May 5 and July 1, several (Grace A. Elliot).

Summary.—Widely distributed on both high and low ground. It emerges in May and continues through June into July. In hot summers a partial second brood emerges in August. Larvæ feed exposed on heather, birch, rose, willow, thistles and other low plants, usually in September.

**Craniophora ligustri* Fabr. Coronet. 215.

- 1874 Eyemouth, one from a pupa and one at sugar (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).
- 1875 Blackhouse Dene, larvæ fairly common on Ash, (J. Anderson, *ibid.* p. 481).
- 1902 Lauderdale. Woods, on Ash, very local. There is a fine variety with no white markings (A. Kelly, in *Lauder and Lauderdale*, p. 304).

- 1927 Has occurred over most of the district, larvæ more often found than perfect insect, usually on Ash ; Foulden, Ayton, Lauder (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 140).

Summary.—We have no recent records of this species in the county. The larvæ are bright green and almost hairless and can be beaten from Ash and Privet in August-September. Pupæ occur under moss growing on the trunks or in the vertical cracks of the bark. The imago flies in June-July.

94. *Cryphia perla* Fabr. Marbled Beauty. 217.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 303).
 1927 Local, but widely distributed and often common. Numerous on sandstone cliffs below Lamberton, and occurs at Ayton (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 193).
 1952 Gavinton, several, June 30-August 24.
 1953 Gavinton, June 28-August 9.
 1954 Gavinton, July 12-August 24.
 1955 Gavinton, July 5-August 14.
 1956 Gavinton, July 9-August 1 and one on September 23 ; Nab Dean, July 7 ; Old Cambus Dean, July 15 ; Burnmouth, August 2 and 6.
 1957 Gavinton, July 6.
 1959 Gavinton, July 10-17.
 1960 Gavinton, June 22 and July 1.

Summary.—Widely distributed from the coast inland and locally common. It emerges about the end of June and flies through July into August. In hot summers a partial second brood occurs in September. The larva feeds on lichens on walls.

95. *Agrotis segetum* Schiff. Turnip. 221.

- 1893 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).

- 1902 Lauderdale, flies over corn fields (A. Kelly, in *Lauder and Lauderdale* p. 306).
- 1913 St. Abb's Lighthouse, one September 25 (W. Evans, *Scot. Nat.* 1914, p. 254).
- 1927 Abundant all over the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 140).
- 1951 Pease Bay, one at sugar, June 16 (E. C. Pelham-Clinton).
- 1953 Gavinton, at light, July 3 and Nov. 21.
- 1955 Gavinton, two, June 12 and July 8; Nesbit Rhodes, one at treacle, September 20.
- 1956 Paxton Dean, at m.v. light, June 9; Gavinton, June 12; Hirsell, three at m.v. light, June 15; Chirnside, June 15; Broomhouse, June 20; Grantshouse, one at treacle, October 20.
- 1957 Gavinton, at m.v. light, June 18 and 21.
- 1959 Birgham House, September 2, 6, 10 and 12 (Grace A. Elliot).
- 1960 Gavinton, June 3 and 16; Birgham House, May 17 (Grace A. Elliot).

Summary.—Widespread and fairly common, double brooded. It emerges about the beginning of June (or even in May) and flies until early July. A second brood emerges in early September and continues through October into November. The imagines come to treacle and light and are very variable in both size and colour. In the hot summer of 1959 many specimens were very pale.

*96. *Agrotis vestigialis* Rott. Archer's Dart. 222.

- 1876 Eyemouth, one at sugar on sea banks (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1879 Ayton Woods (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
- 1927 Rare in Berwickshire, occurs about St. Abbs, and occasionally at Lamberton (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 140).
- 1932-33 Cockburnspath, in August, fairly common on flowers of Marram Grass at night (D. A. B. Macnicol).

Summary.—Although this species is common on the

Northumbrian and East Lothian coasts it is relatively rare in Berwickshire but has occurred sufficiently to suggest that it may be indigenous.

97. *Agrotis clavis* Hufn. (*corticea* Hübner.).

Heart and Club. 223.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale, common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Not common. Buglass got four at Ayton; Hardy took it at Old Cambus (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 141).
- 1956 Gavinton, three at m.v. light, July 9 and 14; Old Cambus Dean, several, July 15.
- 1960 Gavinton, at m.v. light, June 21 and 24.

Summary.—Not common but well distributed, probably most common at the coast. The imagines fly from the end of June through July and come readily to m.v. light.

98. *Agrotis exclamationis* Linn. Heart and Dart. 225.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1902 Lauderdale (A. Kelly, in *Lauder and Lauderdale*, p. 306).
- 1911-14 St. Abb's Lighthouse, seven, July 27, 1911; one, July 12, 1913; four, July 12, 1914 (W. Evans, *Scot. Nat.* 1914, p. 254).
- 1927 Abundant all over the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 140).
- 1951 Pease Bay, June 16; Gordon Moss, June 30, several at sugar (E. C. Pelham-Clinton).
- 1952 Gavinton, June 6-July 10.
- 1953 Gavinton, June 12-July 10.
- 1954 Gavinton, July 13-July 28 (A.G.L.); Pease Bay, June 26, Gordon Moss, June 27 (E. C. Pelham-Clinton).
- 1955 Gavinton, June 8-July 28 (A.G.L.); Gordon Moss, July 18 (E. C. Pelham-Clinton).

- 1956 Gavinton, June 11-August 1; Hirsell, June 15 and July 24; Broomhouse, June 20; Bell Wood, June 23; Linkum Bay, June 30; Nab Dean, July 7; Old Cambus Dean, July 15; Gordon Moss, June 11-July 18 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, May 28-July 16; Gordon Moss, July 20 (E. C. Pelham-Clinton).
- 1959 Gavinton, July 10 and one October 10 (second brood).
- 1960 Gavinton, very abundant, May 22-July 27; Birgham House, May 28-June 23 (Grace A. Elliot).

Summary.—Abundant all over the county emerging about the end of May or early June and continuing to the end of July. In hot summers a partial second brood may occur in October.

99. *Agrotis ipsilon* Rott. Dark Sword Grass. 229.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Eyemouth (W. Shaw, *ibid.*, p. 236).
- 1875 Preston, one at sugar (J. Anderson, *ibid.* p. 481).
- 1902 Lauderdale, rare (A. Kelly in *Lauder and Lauderdale* p. 306).
- 1913 St. Abb's Lighthouse, two, September 27, 1913 (W. Evans, *Scot. Nat.* 1914, p. 254).
- 1927 Generally distributed, locally not uncommon, Ayton, Fans, Cockburnspath (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 140).
- 1951 Gordon Moss, one June 30 (E. C. Pelham-Clinton).
- 1952 Dowlaw, one at sugar, August 30 (E. C. Pelham-Clinton); Gavinton, one at treacle, September 12, one at street lamp, November 4 (A.G.L.).
- 1953 Gavinton, at street lamps, October 15 and November 24.
- 1954 Gavinton and Nesbit, three at treacle, September 15-22.
- 1955 Gordon Moss, two at m.v. light, April 28 (D. A. B. Macnicol); Kyles Hill, Duns Castle Lake, Oxendean Pond, Gavinton, Nesbit, twelve at treacle and light, August 12-October 7 (A.G.L.).

- 1956 Aiky Wood (near White Gate), one at treacle, August 9 ;
Kyles Hill, two at m.v. light in quarry, September 8.
- 1957 Gordon Moss, one at light, July 30 (E. C. Pelham-Clinton).
- 1959 Gavinton, several at m.v. light—some very pale specimens October 6-9 ; Birgham House, at m.v. light, September 6, 29 and October 9 (Grace A. Elliot).
- 1960 Pettico-Wick, one at light, August 27 (E. C. Pelham-Clinton) ; Gavinton, September 21 and 25 (A.G.L.).

Summary.—A common species occurring all over the county chiefly in late summer and autumn but occasionally in spring. South considered that the spring imagines were probably immigrants (*Moths of the British Isles*, Series I, p. 209). C. B. Williams states that in Egypt and India it is very definitely a migrant species arriving in autumn and producing two or three broods in winter. The imagines are abundant in March and April when they presumably migrate (*Insect Migration*, Collins, p. 69). R. A. French recorded it in Somerset at the end of February 1958 (*Entomologist* 91, p. 90) and Baron de Worms recorded it at Woking on February 15, 1958 (*ibid.* p. 100). There is little doubt about the autumn migration thus French records that in 1955 "thousands" were seen at Wimborne, Dorset in the second week of August, and at Studland, Dorset 1,239 specimens were caught in one m.v. trap on August 24 (*Entomologist*, 89, p. 145). One specimen was taken on the Seven Stones Light Vessel 16 miles off Land's End (*ibid.* p. 179)

100. *Euxoa nigricans* Linn. Garden Dart. 233.

- 1874 Eyemouth, comes freely to sugar (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236).
- 1902 Lauderdale, common near gardens (A. Kelly, in *Lauder and Lauderdale*, p. 306).
- 1927 Shaw used to take it fairly frequently at Eyemouth and Ayton (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 141).
- 1952 Gavinton, July 28-August 12 (A.G.L.) ; Gordon Moss, one at sugar, August 10 (E. C. Pelham-Clinton).

- 1953 Gavinton, August 7-31 (A.G.L.) ; Gordon Moss, one at sugar, July 18 (E. C. Pelham-Clinton).
- 1954 Gavinton, August 8-September 2.
- 1955 Gordon Moss, July 21 ; Bell Wood, July 29 and August 4 ; Duns Castle Lake, August 22. All at m.v. light.
- 1956 Linkum Bay, one, July 21 ; Hirsell, two, July 24 ; Pettico Wick, one, July 29 ; Burnmouth, several August 2, 6 and 26 ; Aiky Wood (near Whitegate) August 9 ; Gordon Moss, August 10 and September 22 ; Old Cambus Dean, August 20 and September 1 ; Kyles Hill, August 24 and September 8 ; mostly at m.v. light (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gordon Moss, July 20 ; Gavinton, August 5 (A.G.L. and E. C. Pelham-Clinton).
- 1959 Gavinton, August 6.
- 1960 Gavinton, August 7 ; Birgham House, August 13 (Grace A. Elliot).

Summary.—Widespread and fairly common emerging towards the end of July and flying throughout August into September.

101. *Euxoa tritici* Linn. White-line Dart. 234.

- 1875 Eyemouth, one (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482).
- 1875 Ayton Castle, a pair (S. Buglass, *ibid.*, p. 483).
- 1876 Eyemouth, four at sugar (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1913 St. Abb's lighthouse, one in August and another on September 27 (W. Evans, *Scot. Nat.*, 1914, p. 254).
- 1927 Abundant on Northumbrian and East Lothian coasts but rarer on Berwickshire coast. Seldom noticed inland. In 1876 var. *aquilina* at Eyemouth and two others later (G. Bolam, *H.B.N.C.*, Vol. XXVI, pp. 141, 142).
- 1951 Pease Bay, several at Ragwort, August 26 (E. C. Pelham-Clinton).

- 1952 Gordon Moss, one at sugar, August 10 ; Dowlaw, a few at sugar and Ragwort, August 30 (E. C. Pelham-Clinton).
- 1955 Bell Wood above Cranshaws, one at m.v. light, July 29 (A.G.L.).
- 1956 Burnmouth, August 6 and 26 ; Old Cambus Dean, fourteen at m.v. light, August 20, others September 1 ; Kyles Hill Quarry, two, September 8 (A.G.L.) ; Pettico Wick, three at m.v. light, July 28 (E. C. Pelham-Clinton).
- 1959 Birgham House at m.v. light, August 12 (Grace A. Elliot).
- 1960 Pettico Wick, one, August 27 (E. C. Pelham-Clinton) ; Birgham House, August 29 (Grace A. Elliot).

Summary.—Although this species occurs chiefly at the coast it is found in the Tweed Valley and on moorlands inland. It emerges about the beginning of August and continues into September.

*102. *Euxoa obelisca* Hübn. Square Spot Dart. 236.

- 1874 Eyemouth, one at ragwort on sea banks (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236).
- 1875 Eyemouth, sea banks, about a dozen (W. Shaw, *ibid.*, p. 482).
- 1875 Sea banks at sugar (S. Buglass, *ibid.*, p. 483).
- 1913 St. Abb's Lighthouse, two on August 29 1913 (W. Evans, *Scot. Nat.*, 1914, p. 255).
- 1932 Cockburnspath, August 16-20 and again in 1933 and 1934 (D. A. B. Macnicol).
- 1952 Dowlaw Dean, fairly common at ragwort flowers, August 30 (D. A. B. Macnicol and E. C. Pelham-Clinton).
- 1960 Pettico Wick, three females at m.v. light, August 27 (E. C. Pelham-Clinton).

Summary.—Well distributed at the coast where it has been taken on flowers of ragwort at night as well as at treacle and light. It flies during the last two weeks in August.

103. *Lycophotia varia* Vill. (*strigula* Thunb.).

True Lover's Knot. 237.

- 1843 Near Pease Bridge by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).
- 1874 Eyemouth, about six at sugar on sea banks (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236); Hoardweil Moor, common (A. Anderson, *ibid.*, p. 232).
- 1902 Lauderdale, common (A. Kelly, *Lauder and Lauderdale*, p. 306).
- 1913-14 St. Abb's lighthouse, six on July 12, 1913; twenty-seven on July 12, 1914 (W. Evans, *Scot. Nat.* 1914, p. 255).
- 1927 Common on moors and even on sea banks where heather grows (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 143).
- 1951 Gordon Moss, a few at sugar, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton, two at street lamps, July 10.
- 1953 Kyles Hill, August 8.
- 1954 Gavinton, Kyles Hill, Greenlaw Moor, July 11-August 1 (A.G.L.); Gordon Moss, June 27 (E. C. Pelham-Clinton).
- 1955 Penmanshiel Moss, June 18; Bell Wood, July 29 and August 4; Gavinton, July 10 and 23; Spottiswoode, July 27; Retreat, July 31; Gordon Moss, June 24-August 2; Kyles Hill, August 6; most at m.v. light.
- 1956 Linkum Bay, Hirsell, Burnmouth, Aiky Wood, Kyles Hill, Bell Wood, Gavinton, Gordon Moss; June 21-August 24.
- 1957 Gordon Moss, several at light, July 20 (E. C. Pelham-Clinton).
- 1958 Kyles Hill, July 7.
- 1959 Gavinton, July 17.
- 1960 Birgham House, July 26 (Grace A. Elliot).

Summary.—A very common moorland species, frequent also on the coast but less common on the Merse and near the Tweed. It emerges towards the end of June and continues through July into August.

*104. *Actebia praecox* Linn. Portland Dart. 238.

1876 Ayton Woods, one at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).

Summary.—This is a species associated with sand dunes. Bolam recorded it for Cheswick Links and Ross Links in Northumberland. The larvæ feed on *Psamma arenaria* (Marram Grass), *Salix repens* (Creeping Willow), *Ononis repens* (Rest Harrow) and other low plants. The imago flies in August and may only be a casual wanderer to the rocky coast of Berwickshire though it could possibly be indigenous between Berwick and Burnmouth.

105. *Peridroma porphyrea* Schiff. (*saucia* Hübn.).

Pearly Underwing. 240.

1875 Eyemouth, at sugar by W. Sandison (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482); Ayton, at sugar (S. Buglass, *ibid.*, p. 483).

1877 Ayton Castle, a series bred from larvæ on lettuce and cabbage (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322).

1902 Lauderdale, not so common as *A. ipsilon* (A. Kelly in *Lauder and Lauderdale*, p. 306).

1914 "I have taken it in several places on both sides of the Tweed and have had or seen examples from Ayton, Eyemouth, and Cockburnspath" (G. Bolam, *Scot. Nat.*, 1914, p. 71).

1927 Not common, more frequent in some seasons than in others. Hardy took it at Cockburnspath (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 143).

1955 Nesbit Hill, one at treacle, September 7; Gavinton, two in m.v. trap, September 20 and 23; Kyles Hill, one at m.v. light, October 11 (A.G.L.).

Summary.—Of uncertain occurrence—generally regarded as an immigrant in autumn and probably not permanently established. We have no records of the earlier brood sometimes taken in May and June.

*106. *Ammogrotis lucerneae* Linn. Northern Rustic. 241.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 "I had formerly taken several on Valerian but this season it was abundant on flowers of Wood Sage. It does not come to sugar. It is a very sluggish insect and will allow one to box it off the flowers without attempting to fly." (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236).
 1952 On Ragwort flowers at night in August at the coast. (D. A. B. Macnicol).

Summary.—This species favours rocky coasts and mountain screes flying both by day and night. It is probably best sought at flowers of Ragwort, Wood Sage and Valerian at the coast in August.

*107. *Rhyacia simulans* Hufn. Dotted Rustic. 242.

- 1875 Sea banks at wood sage (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
 1877 Eyemouth sea banks, one (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).
 1879 Sea banks (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1927 Seems to be distinctly rare (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 144).

Summary.—We have no recent records of this local species which ranges as far north as the Orkneys. Baron de Worms states that it is an insect of "years" sometimes abundant and then disappearing for a period. It should be sought at flowers, *e.g.*, Wood Sage and Valerian at the coast in July and August. Robson states that it was taken at sugar in Upper Teesdale in 1874.

108. *Graphiphora augur* Fabr. Double Dart. 245.

- 1902 Lauderdale, common on heather (A. Kelly in *Lauder and Lauderdale*, p. 306).
 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).

- 1952 Gordon Moss, one larva on *Salix*, April 26 (E. C. Pelham-Clinton); Langton, three at treacle, July 9 and 14 (A.G.L.).
- 1954 Gordon Moss, one at sugar, June 27 (E. C. Pelham-Clinton); Gavinton and Polwarth, two at treacle, July 20 and 22 (A.G.L.).
- 1955 Gordon Moss, several at treacle and light, June 24, July 4 and 18 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Nab Dean near Paxton, common at m.v. light, July 7; Gordon Moss, July 18.
- 1960 Birgham House, July 1-18, a few (Grace A. Elliot).

Summary.—A fairly common species at sugar and light in late June and July. Widely distributed but more abundant in certain localities.

109. *Amathes agathina* Dup. Heath Rustic. 246.

- 1874 Drakemire, one from larva (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231); Hoardweel Moor (A. Anderson, *ibid.*, p. 232).
- 1876 Eyemouth, one at sugar on seabanks (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124.).
- 1902 Lauderdale. J. Turnbull found larvæ by sweeping *Calluna vulgaris*. A worn specimen from Whitelaw Edge. (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Apparently rare (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 143).
- 1954 Kyles Hill, two on September 5, at Tilley lamp.
- 1955 Kyles Hill, one at m.v. light, August 19.
- 1956 Kyles Hill, two at m.v. light, August 24 (A.G.L.).

Summary.—Somewhat local. According to Baron de Worms it usually occurs where there is long heather. It comes readily to light in late August or early September.

110. *Amathes glareosa* Esp. Autumnal Rustic. 250.

- 1875 Eyemouth, two or three at sugar (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482).
- 1902 Lauderdale. Feeds on broom and other plants (A. Kelly in *Lauder and Lauderdale*, p. 306).

- 1927 Well distributed. Lamberton sea-banks and Foulden Hag (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1952 Gavinton, two at street lamps August 18 and 31 (A.G.L.); Dowlaw, two at sugar, August 30 (E. C. Pelham-Clinton).
- 1953 Kyles Hill, three at Tilley lamp, September 1.
- 1955 Kyles Hill, several at m.v. light, August 13 and 19; Oxendean Pond, August 27; Retreat, September 3; Elba, September 18.
- 1956 Old Cambus Dean at treacle and m.v. light, August 20 and September 1; Hirsell, August 23 and September 7; Kyles Hill, six, August 24-September 8; Burnmouth, two on August 26; Gavinton, September 15.
- 1959 Birgham House, at m.v. light, August 30 and September 4 (Grace A. Elliot).
- 1960 Gavinton, in m.v. trap, August 22 and September 3.

Summary.—Widespread but most common on high ground, fairly frequent at the coast and it occurs in the Tweed valley. It emerges about the middle of August and continues to mid-September coming to treacle and m.v. light. Both slate grey and pinkish forms occur.

111. *Amathes castanea* Esp. Grey Rustic. 251.

- 1902 Lauderdale; heathery hills (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1927 Not common. One near Duns in 1888 (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 149).
- 1952 Reared from larva found on heather on Greenlaw Moor, May 19.
- 1954 Kyles Hill, seven on heather at night including a pair *in cop.*, August 26.
- 1955 Kyles Hill, several at m.v. light, August 12, 13 and 19.
- 1956 Aiky Wood near Whitegate, one at treacle on fence along roadside, August 9; Kyles Hill, at m.v. light, September 8 (A.G.L.).

Summary.—Not uncommon on heathery moors. All the

Berwickshire specimens seen so far have been the grey form. The larvæ can be obtained on heather in May.

112. *Amathes baja* Fabr. Dotted Clay. 252.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Broomhouse (A. Anderson, *ibid.*, p. 232).
- 1902 Lauderdale, very common at sugar (A. Kelly, in *Lauder and Lauderdale*, p. 307).
- 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1952 Gavinton, at street lamps, July 11-August 15 (A.G.L.) ; Gordon Moss, several at sugar, August 10 (E. C. Pelham-Clinton).
- 1953 Gavinton, July 9-August 6.
- 1954 Gordon Moss, a few larvæ on *Salix*, April 28 (E. C. Pelham-Clinton) ; Gavinton, Duns Castle Woods, Kyles Hill, July 22-September 1 (A.G.L.).
- 1955 Gordon Moss, Gavinton, Kyles Hill, Spottiswoode, Bell Wood, Retreat, Duns Castle, Oxendean Pond, July 4-September 3.
- 1956 Gordon Moss, Linkum Bay, Hirsell, Gavinton, Burnmouth, Aiky Wood, Kyles Hill, Old Cambus Dean, Pettico Wick ; July 18-September 9 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, Gordon Moss ; July 14-August 5 (A.G.L. and E. C. Pelham-Clinton).
- 1959 Gavinton, July 14 ; Birgham House, July 12-August 20 (Grace A. Elliot).
- 1960 Gavinton, July 13-August 15 ; Birgham July 13-August 25 (G.A.E.).

Summary.—A common and widespread species emerging first in the early half of July and continuing into early September. The larva can be found feeding at night in April and May.

[*Amathes depuncta* Linn. Plain Clay. 253.

- 1902 Lauderdale. A rare moth ; sorrel and nettles (A. Kelly, in *Lauder and Lauderdale*, p. 306).

Summary.—There are authentic records of this species for Selkirk and Galashiels and the above record for Lauderdale may have been based on the Galashiels records. Its presence in Berwickshire therefore requires confirmation.]

113. *Amathes c-nigrum* Linn.

Setaceous Hebrew Character. 254.

- 1880 Gordon Moss (R. Renton *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Addinston Policy, not so common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1911, 1913 St. Abb's Lighthouse, four on October 29, 1911 ; one July 12, 1913 (W. Evans, *Scot. Nat.*, 1914, p. 256).
- 1949 Preston, at sugar, October 10.
- 1952 Gavinton, at street lamps, June 24-July 16 and September 23.
- 1953 Gavinton, July 9 and August 7.
- 1954 Gavinton, August 24 and October 2.
- 1955 Gavinton, July 4-September 23 ; Gordon Moss, June 24, July 1, 18 and 21, September 23 ; Elba, September 18 ; Kyles Hill, October 11 at m.v. light (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gavinton, Hirsell, Broomhouse, Linkum Bay, Nab Dean, Old Cambus Dean, Gordon Moss, Burnmouth, Pettico Wick (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, June 15-July 23 (A.G.L.) ; Gordon Moss, July 20 (E. C. Pelham-Clinton).
- 1959 Gavinton, July 10 and October 9.
- 1960 Gavinton, June 21-July 13.

Summary.—Generally common and widespread. There are two broods in the year, one from about mid-June to early August and the other from about mid-September to mid-October. The imagines come both to sugar and light.

114. *Amathes triangulum* Hufn. Double Square-spot. 256.
- 1873 Duns Castle Woods by D. Paterson (A Kelly, *H.B.N.C.*, Vol. VII, p. 122); Eyemouth, (W. Shaw, *ibid.*, p. 123).
- 1874 Ale banks, two at sugar, not common (W. Shaw, *ibid.*, p. 236).
- 1902 Addinston Policy, not common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Fairly distributed but seldom found in plenty (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1952 Gavinton, fairly common at street lamps, June 11–July 26, also reared from larvæ found in May (A.G.L.).
- 1953 Gavinton, July 12–August 7.
- 1954 Gavinton, July 10–31.
- 1955 Gordon Moss, July 4 and August 2; Spottiswoode, July 27; Gavinton, July 6–August 6; Bell Wood, August 4; Kyles Hill, August 6–12, all at m.v. light.
- 1956 Broomhouse; Hirsell (several); Linkum Bay; Bell Wood; Old Cambus Dean; Burnmouth; Gordon Moss; June 20–August 10.
- 1957 Gavinton, July 3–23.
- 1959 Birgham House at m.v. light, July 4 (Grace A. Elliot).
- 1960 Gavinton, June 21.

Summary.—A common and widespread species occurring chiefly in wooded districts from the coast and the Tweed to the hills. It emerges about mid-summer and continues through July into early August. The larva can be found around the borders of woods, feeding on herbaceous plants at night in May.

*115. *Amathes stigmatica* Hübn.

Square-spotted Clay. 257.

- 1874 Ayton, one taken by S. Buglass (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236).
- 1927 Shaw recorded one from Ayton in 1874—the only Berwickshire record (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 147).

Summary.—Nothing further is known at present about this species in the county. It is a local species occurring in August and favouring wooded districts.

116. *Amathes sexstrigata* Haw. (*umbrosa* Hübn.).

Six-striped Rustic. 258.

- 1874 Eyemouth, several (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236); Lauderdale, one or two from *Viburnum opulus* (A. Kelly, *ibid.*, p. 233).
- 1875 Broomhouse, two (A. Anderson, *ibid.*, p. 481).
- 1902 Lauderdale—Longcroft on Guelder Rose (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1927 Frequent, Ayton, Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 149).
- 1952 Gavinton, August 2 and 8, at light and on Ragwort (A.G.L.); Gordon Moss, several at sugar (E. C. Pelham-Clinton).
- 1953 Gavinton, July 24-August 6.
- 1954 Gavinton and Kyles Hill, July 20-August 4.
- 1955 Gavinton, Kyles Hill, Gordon Moss, Spottiswoode; July 10-August 26 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Nab Dean; Linkum Bay; Gavinton; Burnmouth; Aiky Wood near Whitegate; Gordon Moss; July 7-August 10.
- 1957 Gavinton, July 16-August 17; Gordon Moss, July 20 (E. C. Pelham-Clinton).
- 1959 Gavinton, July 12.
- 1960 Gavinton, July 25; Birgham House, July 18 (Grace A. Elliot).

Summary.—Common and widely distributed; it first emerges about mid-July and continues through August.

117. *Amathes xanthographa* Fabr.

Square-spot Rustic. 259.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).

- 1902 Lauderdale, extremely common (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1913 St. Abb's Lighthouse, four on August 29 (W. Evans, *Scot. Nat.*, 1914, p. 256).
- 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1951 Pease Bay, at sugar and Ragwort, August 26 (E. C. Pelham-Clinton).
- 1952 Reared from larva—imago emerged July 28 ; Gavinton, August 15-20 (A.G.L.) ; Gordon Moss, August 10 ; Dowlaw, at sugar and light, August 30 (E. C. Pelham-Clinton).
- 1953 Gavinton, August 7-20.
- 1954 Polwarth, Gavinton, Nesbit, at treacle and light, August 1-September 15.
- 1955 Bell Wood, abundant at treacle, July 29 and August 4 ; Retreat, July 31 ; Gavinton, Kyles Hill and Nesbit, July 31-September 11 ; Gordon Moss, a few larvæ, April 28 (E. C. Pelham-Clinton) ; imagines at m.v. light, August 2 and 9 (A.G.L.).
- 1956 Aiky Wood near Whitegate, August 9 ; Old Cambus Dean, August 20 and September 1 ; Hirsell, August 23 ; Burnmouth, August 26 ; Kyles Hill, September 8.
- 1959 Gavinton, August 5 ; Birgham House, July 27 (Grace A. Elliot).
- 1960 Gavinton, August 30 and September 6 ; Pettico Wick, many at sugar and light, August 27 (E. C. Pelham-Clinton) ; Birgham House, August 3-22 (Grace A. Elliot).

Summary.—An abundant and variable species, common at treacle and light. It first emerges about the end of July and continues through August until about mid-September.

118. *Diarsia brunnea* Fabr. Purple Clay. 260.

- 1874 Broomhouse, one from larva (A. Anderson, *H.B.N.C.*, Vol. VII, p. 232) ; Cleekhimin, garden (A. Kelly, *ibid.*, p. 233).
- 1875 Eyemouth, abundant at sugar (W. Shaw, *ibid.*, p. 482).

- 1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Well distributed and generally common, Ayton and Duns (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 147).
- 1952 Lees Cleugh (Cuddy Wood), one on birch trunk, June 29; Gavinton, one at treacle, July 16.
- 1954 Kyles Hill, at Tilley lamp, July 22; Oxendean Pond, at treacle, July 30.
- 1955 Gordon Moss, abundant at treacle and light on railway side, June 24-July 18 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Bell Wood; Hirsell; Nab Dean Pond; Kyles Hill; Gavinton; Gordon Moss; Burnmouth; Aiky Wood near Whitegate; June 23-August 24.
- 1959 Gavinton in m.v. trap, July 12 and 14.
- 1960 Gavinton, July 13; Birgham House, June 26 (Grace A. Elliot).

Summary.—Widely distributed and fairly common in wooded localities. It emerges about the last week in June and continues well into August. A lovely moth when seen at the sugar patch in its first fresh splendour with a purplish bloom suffused over the fore-wings.

119. *Diarsia festiva* Schiff. (*primulae* Esp.).

Common Ingrailed Clay. 261.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Broomhouse (A. Anderson, *ibid.*, p. 232); Lauderdale, junipers Longcroft (A. Kelly, *ibid.*, p. 233).
- 1902 Lauderdale, not very common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Abundant—from sea-shore to high up the hills, very variable. Abundant at sugar about August 12. Visits light freely (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 148).
- 1952 Gavinton and Lees Cleugh, July 6-August 1.
- 1953 Gavinton, street lamps, August 2.

- 1954 Gordon Moss, one at light, June 27 (E. C. Pelham-Clinton) ; Gavinton and Kyles Hill, July 22-August 15 (A.G.L.).
- 1955 Gavinton ; Kyles Hill ; Gordon Moss ; Spottiswoode ; Bell Wood ; Retreat ; June 19-August 26 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Old Cambus Dean ; Gordon Moss ; Hirsell ; Burnmouth ; Aiky Wood near Whitegate ; Kyles Hill ; July 15-August 24.
- 1957 Gavinton, July 14 ; Gordon Moss, several, July 20 (A.G.L. and E. C. Pelham-Clinton).
- 1959 Gavinton, July 17 and 27, in m.v. trap.

Summary.—An abundant species and extremely variable. It occurs at the coast, in the Tweed valley and on high ground. The small bluish form known as *conflua* occurs on heather moors. It emerges about mid-July and continues throughout August. Occasionally early specimens appear in June.

120. *Diarsia dahlia* Hübn. Barred Chestnut. 263.

- 1875 Grantshouse, one pupa under moss on a dyke (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481) ; Hoardweil, common among low oaks (A. Anderson, *ibid.*, p. 482).
- 1876 Ayton woods, eight at sugar (S. Buglass, *H.B.N.C.* Vol. VIII, p. 128).
- 1880 Aiky Wood and Abbey St. Bathans (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
- 1902 Lauderdale, not common (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1927 Generally scarce though widely recorded (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 147).
- 1954 Kyles Hill, at treacle and Tilley lamp, August 26-September 5.
- 1955 Kyles Hill, two on August 12 ; Oxendean Pond, August 27 ; Retreat, September 3 ; Elba, September 18 ; all at m.v. light.
- 1956 Gordon Moss, August 10 ; Hirsell, August 23 and September 7 ; Kyles Hill, August 24 and September 8.
- 1957 Gavinton, August 18.

1960 Gavinton, August 21.

Summary.—Most common on high ground especially where there are oak woods bordering moors. It occurs more sparingly on the Merse. Normally it first emerges about the last week in August and continues well into September.

121. *Diarsia rubi* View. Small Square Spot. 264.

- 1874 Lauderdale, one from *Urtica dioica* at Addinston (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
- 1875 Lamberton Moor, three at sugar (W. Shaw, *ibid.*, p. 482).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Seems scarce all over Berwickshire (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1927 Widely distributed in moderate numbers. Has been taken at Ayton and Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 148).
- 1951 Gordon Moss, two at sugar, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton, at light, July 27.
- 1953 Gavinton, July 25.
- 1954 Gordon Moss, three at light, June 27 (E. C. Pelham-Clinton).
- 1955 Gordon Moss, several, June 24-July 18 (A.G.L. and E. C. Pelham-Clinton); Gavinton, July 8, 9, 23 and 25; Spottiswoode, July 27, all at m.v. light.
- 1956 Hirsell, June 15; Kyles Hill, June 26; Gavinton, June 25, July 7 and 22; Nab Dean, July 7; Gordon Moss, July 18 and 21 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, July 4; Gordon Moss, many, July 20 (A.G.L. and E. C. Pelham-Clinton).
- 1960 Gavinton, July 2.

Summary.—Fairly common, especially in damp marshy places. It emerges in the latter half of June and flies throughout July being single brooded. Some of the specimens are large and bright and could be classed as *D. florida* but as there is some doubt about the true specific rank of *florida* I prefer to regard them all as one species. The explanation

of the problem may be connected with the existence of single brooded and double brooded races. According to South *D. rubi* is double brooded and occurs in almost every part of the British Isles. Harper states that *D. rubi* occurs in Inverness-shire in May and July whereas *D. florida* flies in June (*Ent. Record*, 66, p. 62). This might suggest that in Scotland *D. rubi* is the double brooded form and *D. florida* the single brooded form. So far, however, we have no records for May in Berwickshire and both the pale and bright race occur together in June and July. Robson's records for Northumberland agree with those for Berwickshire though he only mentions one exact date (July 7, 1876). He regarded it as rather uncommon and partial to damp localities. In the light of these records it is therefore possible that our species is the single brooded race sometimes designated *D. florida*. Mr. E. C. Pelham-Clinton agrees that the Berwickshire species is single brooded and is as pale in colour as English *florida*—much paler than the highland race, but he inclines to the view that *florida* is not a true species distinct from *rubi*.

122. *Ochropleura plecta* Linn. Flame Shoulder. 265.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale, common (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 146).
- 1951 Gordon Moss, many at sugar, June 30 (E. C. Pelham-Clinton).
- 1952 Gordon Moss, June 14 (E. C. Pelham-Clinton); Gavinton, common, June 15-July 19 (A.G.L.).
- 1953 Gavinton, May 22-July 7.
- 1954 Gavinton and Polwarth, May 24-August 26 (a late season); Pease Bay, June 26; Gordon Moss, June 27 (A.G.L. and E. C. Pelham-Clinton).
- 1955 Oxendean Pond, June 4; Kyles Hill, June 10-August 6; Gavinton, June 15-July 23; Gordon Moss, June 24-July 21; Spottiswoode, July 27 (A.G.L. and E. C. Pelham-Clinton).

- 1956 Hirsell ; Retreat ; Gavinton ; Broomhouse ; Kyles Hill ; Bell Wood ; Linkum Bay ; Nab Dean ; Old Cambus Dean ; Burnmouth ; Aiky Wood near Whitegate ; Gordon Moss ; May 30-August 10 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, June 30 and July 3 (A.G.L.) ; Gordon Moss, June 8 (E. C. Pelham-Clinton).
- 1959 Gavinton, July 12 ; Birgham House, June 23 (Grace A. Elliot).
- 1960 Gavinton, June 21 ; Birgham House, June 16-24 (G.A.E.).

Summary.—Widespread and common on both low and high ground. It first emerges in late May or early June and continues through July into early August coming both to light and treacle.

123. *Axylia putris* Linn. Flame Rustic. 266.

- 1927 Rare, no Berwickshire record (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
- 1952 Gavinton, five at street lamps, June 28-July 10.
- 1953 Gavinton, three, July 12-25.
- 1955 Gavinton, seven in m.v. trap, July 7-August 28 ; Elba, one at m.v. light, September 18 (A.G.L.) ; Gordon Moss, one, July 18 (E. C. Pelham-Clinton).
- 1956 Gavinton ; Hirsell ; Broomhouse ; Linkum Bay ; Nab Dean ; Old Cambus Dean ; Gordon Moss ; Burnmouth ; June 12-August 6.
- 1957 Gavinton, July 3-23.
- 1959 Gavinton, July 16-24 ; Birgham House, July 4-8 (Grace A. Elliot).
- 1960 Gavinton, June 16 and 25. All records at m.v. light.

Summary.—This is one of the species which has been proved common and widespread in the county by the use of m.v. light for collecting. It first emerges about mid-June and continues through July into August with occasionally a partial second brood in September.

124. *Eurois occulta* Linn. Great Brocade. 267.

- 1875 Eyemouth, one at sugar, Highlaws (W. Shaw, *H.B.N.C.*, Vol. VII, p. 483); Ayton, two fine specimens at sugar (S. Buglass, *ibid.*, p. 483).
- 1902 Lauderdale, never common (A. Kelly, *Lauder and Lauderdale*, p. 309).
- 1927 Has been taken over a wide area, but generally only singly and at long or uncertain intervals. One at rest on an old oak in Foulden Hag, August 1891 (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 150).
- 1948 Coldingham, August 16 (W. B. R. Laidlaw, *H.B.N.C.*, Vol. XXXI, p. 247).
- 1954 Gavinton, one at light and one at treacle, August 24 and 25.
- 1955 Gavinton; Kyles Hill; Spottiswoode; Oxendean Pond; Retreat; Bell Wood; thirty-eight specimens at m.v. light and one at treacle, July 10-August 30. The one taken at treacle on a Scot's Pine trunk near Bent's Corner above Polwarth was a perfect fresh specimen and was probably locally bred the date being July 10.
- 1960 Gavinton, three in m.v. trap, August 4, 7, and 10 (A.G.L.); Birgham House, one on August 3 at m.v. light (Grace A. Elliot).

Summary.—There is some doubt whether this species is indigenous in the county or a sporadic migrant from the Highlands where it is often abundant. There seems no reason why it should not maintain itself in the Borders though its numbers seem to fluctuate. Most of the specimens are of a fairly light grey colour. It occurs in July and throughout August on both high and low ground.

125. *Anaplectoides prasina* Fabr. Green Arches. 268.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Banks of the Ale, several at sugar (W. Shaw, *ibid.*, p. 237).
- 1902 Lauderdale, Cleekhimin (A. Kelly in *Lauder and Lauderdale*, p. 309).

- 1927 Well distributed, moderately common. Buglass once took over a hundred at sugar in one night at Ayton. Recorded for Fans, Gordon Moss, Foulden, Preston, Duns and Paxton (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 149).
- 1951 Gordon Moss, many at sugar, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton, July 5 and 15.
- 1954 Kyles Hill, three, July 24; Duns Castle Woods, one, July 30; Gordon Moss, several at sugar and light, June 27 (A.G.L. and E. C. Pelham-Clinton).
- 1955 Gordon Moss, abundant at treacle and m.v. light, June 24-July 30; Gavinton and Kyles Hill, several, July 10-August 13; Retreat, July 31.
- 1956 Gordon Moss, one larva on April 29 (E. C. Pelham-Clinton); Kyles Hill, Hirsell, Gavinton, Gordon Moss, several imagines at m.v. light and treacle, June 26-July 18.
- 1959 Gavinton, July 24.

Summary.—Common in well wooded districts. It usually emerges about the last week in June and continues through July into early August.

126. *Triphaena comes* Hübn. (*orbona* Fabr.).

Lesser Yellow Underwing. 271.

- 1874 Lauderdale, plentiful (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
- 1877 Threburnford, common at sugar (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale. Abundant in turnip fields (A. Kelly, in *Lauder and Lauderdale*, p. 306).
- 1927 Very common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
- 1913-14 St. Abb's Lighthouse, three on August 29, 1913; two on August 1, 1914 (W. Evans, *Scot. Nat.*, 1914, p. 278).
- 1951 Pease Bay, one larva, June 16 (E. C. Pelham-Clinton).

- 1952 Bog End Farm, July 8; Gavinton, street lamps, August 1-30 (A.G.L.); Dowlaw, a few at sugar, August 30 (E. C. Pelham-Clinton).
- 1953 Gavinton, August 3-September 16.
- 1954 Gavinton, August 21-September 23.
- 1955 A few larvæ at Gordon Moss, April 28 (E. C. Pelham-Clinton); imagines at Gavinton, Elba, Nesbit, Retreat, Oxendean, Gordon Moss, Duns Castle Lake, Kyles Hill, Bell Wood, Coldingham, July 29-September 18 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gavinton, Burnmouth, Aiky Wood, Gordon Moss, Old Cambus Quarry, Hirsell, Kyles Hill, Fast Castle, Pettico Wick, July 28-September 22 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, one emerged from a pupa, July 22.
- 1959 Gavinton, September 11; Birgham House, common, August-September (Grace A. Elliot).
- 1960 Gavinton, August 4-20; Pettico Wick, August 27 (A.G.L. and E. C. Pelham-Clinton); Birgham House, July 23 (G.A.E.).

Summary.—Common and widely distributed. It occurs from the coast to the hills and visits heather bloom. It usually emerges about the last week in July and continues until late September. Somewhat variable with grey to reddish brown forewings.

127. *Triphaena orbona* Hufn. (*subsequa* Hübn.).

Lunar Yellow Underwing. 272.

- 1877 Sea banks (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322).
- 1902 Lauderdale, pastures and primroses, not common (A. Kelly, in *Lauder and Lauderdale*, p. 306).
- 1927 Local and by no means common. A single specimen was taken at Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
- 1953 One dead specimen found in old Berwickshire High School, Newtown Street, Duns (A.G.L.).

- 1955 Bell Wood, one fresh specimen at m.v. light, August 4 ;
Retreat, one at treacle and two at m.v. light, all
worn, September 3.
- 1956 Bell Wood, one fresh dark specimen at m.v. light,
June 23, two more on July 10 ; Aiky Wood near
Whitegate, one at treacle and three at m.v. light,
August 9.

Summary.—A local species apparently preferring wooded localities on high ground as well as sea braes. It emerges from the last week in June and continues through July and August, comes both to light and treacle.

128. *Triphaena pronuba* Linn.

Large Yellow Underwing. 273.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale—perhaps too common (A. Kelly, *Lauder and Lauderdale*, p. 306).
- 1911-14 St. Abb's Lighthouse, one on July 27, 1911, eleven on August 29, 1913, four on September 25, 1913, two on September 27, 1913, four on July 12, 1914, seven on August 1, 1914 (W. Evans, *Scot. Nat.*, 1914, p. 279).
- 1927 Very common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
- 1951 Gordon Moss, June 30 ; Pease Bay, August 26 (E. C. Pelham-Clinton).
- 1952 Gavinton, June 9-September 20 (A.G.L.) ; Gordon Moss, August 10 ; Dowlaw, August 30 (E. C. Pelham-Clinton).
- 1953 Gavinton, July 6-September 30.
- 1954 Gavinton, July 18-October 5.
- 1955 Gavinton, Gordon Moss, Kyles Hill, Spottiswoode, Bell Wood, Retreat, Duns Castle Lake, Oxendean Pond, Coldingham, June 24-October 11 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Hirsell, June 15 ; Pettico Wick, 125 at light, July 28 ; Gordon Moss, September 22 ; Gavinton, October 7 (A.G.L. and E. C. Pelham-Clinton).

- 1957 Gavinton, July 8-October 9.
 1959 Gavinton, July 10.
 1960 Duns, June 9 (A.G.L.); Pettico Wick, August 27
 (E. C. Pelham-Clinton); Birgham House, July 16-
 August 23 (Grace A. Elliot).

Summary.—Abundant and widespread on both low and high ground. The species starts to emerge about mid-June and continues on the wing into October coming to treacle and light. The larva or "cut-worm" is a garden pest.

129. *Triphaena janthina* Esp.

Lesser Broad Bordered Yellow Underwing. 274.

- 1874 Addinstone, plentiful at sugar (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
 1877 Threeburnford, several at sugar (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Cleekhimin garden (A. Kelly, in *Lauder and Lauderdale*, p. 306).
 1927 Well distributed (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
 1952 Gavinton, common at street lamps, July 25-August 30.
 1953 Gavinton, July 26-September 16.
 1954 Gavinton, August 11-28.
 1955 Gavinton, Spottiswoode, Gordon Moss, Retreat, Oxendean Pond, Duns Castle Lake, Kyles Hill, Coldingham, July 23-September 3 (A.G.L. and E. C. Pelham-Clinton).
 1956 Gavinton, Burnmouth, Aiky Wood, Old Cambus Dean, Hirsell, Pettico Wick, July 19-September 21 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton, July 23-August 18.
 1959 Gavinton, July 23-October 9.
 1960 Gavinton, July 24-August 21; Birgham House, July 18-August 21 (Grace A. Elliot).

Summary.—Common and widespread throughout the county. It starts to emerge about the last week in July and

continues through August and September into early October. The larva occurs in Spring feeding at night on shoots of willow and hawthorn.

130. *Lampra fimbriata* Schreber (*fimbria* Linn).

Broad Bordered Yellow Underwing. 276.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1902 Mr. Robson says this moth is common in Leader Vale (A. Kelly in *Lauder and Lauderdale*, p. 306).
- 1927 Well distributed (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 145).
- 1952 Gavinton, reared from larvæ found in May around borders of Langton woods. The larvæ were fed on Dog's Mercury (*M. perennis*) a poisonous plant; two imagines taken at street lamps on August 24 and 25.
- 1953 Gavinton, one August 9.
- 1955 Bell Wood, at m.v. light, July 29; Oxendean, August 27.
- 1956 Hirsell, one at m.v. light, July 24.
- 1959 Gavinton, several, July 22, 28, August 20, September 4 and 10.
- 1960 Gavinton, August 17 and September 6, in m.v. trap; Birgham House, August 5 (Grace A. Elliot).

Summary.—Widespread but chiefly in wooded localities. The larvæ can be found at night in May round the borders of woods on herbaceous plants and young leaves of willows. The imagines are attracted to m.v. light and treacle, they first appear about the last week of July and continue through August into September.

131. *Mamestra brassicae* Linn. Cabbage. 281.

- 1902 Lauderdale, a most destructive insect (A. Kelly in *Lauder and Lauderdale* p. 305).
- 1913 St. Abb's Lighthouse, four on July 12, 1913 (W. Evans, *Scot. Nat.*, 1914, p. 232).

- 1927 Common everywhere (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 157).
 1952 Gavinton, at street lamps, May 5-July 6.
 1953 Gavinton, May 26.
 1954 Gavinton, May 27-July 16 and August 12.
 1955 Gavinton, May 6-June 30 and July 28-September 17.
 1956 Gavinton, May 20 ; Gordon Moss, June 11 and 14 ; Hirsell, September 7.
 1957 Gavinton, May 29-June 11.
 1960 Gavinton, May 21, July 22 ; Birgham House, July 17-25 (Grace A. Elliot).

Summary.—Common, but somewhat local being partial to gardens where the larva is a pest. The imagines start to emerge in early May and continue on the wing into July ; a second brood may appear in August and September.

132. *Ceramica pisi* Linn. Broom. 283.

- 1843 Near Pease Bridge by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).
 1873 Lauderdale (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
 1875 Lamberton Moor, two at sugar (W. Shaw, *ibid.*, p. 483).
 1876 Ayton, at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
 1902 Lauderdale, among brackens, fairly common (A. Kelly in *Lauder and Lauderdale*, p. 309).
 1927 Has been taken in all parts of the district and is generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 155).
 1951 Gordon Moss, a few at sugar, June 30 (E. C. Pelham-Clinton).
 1952 Gordon Moss, one, June 14 ; a few larvæ on *Salix*, August 10 (E. C. Pelham-Clinton) ; larvæ on Coldingham Moor, August 21 (A.G.L.).
 1954 Gordon Moss, a few at light, June 27 (E. C. Pelham-Clinton) ; larva at Bell Wood, Cranshaws, August 7 (A.G.L.).
 1955 Oxendean Pond, June 4 ; Kyles Hill, June 6 and July 10 ; Gavinton, June 20 and July 9 ; Gordon Moss,

- June 24, July 4 and 18 ; a few larvæ on August 7 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gavinton, Bell Wood (abundant), Kyles Hill, Hirsell, Linkum Bay, Nab Dean Pond, Old Cambus Dean, Gordon Moss (over twenty-five), Burnmouth, May 27-August 10 (A.G.L. and E.C. Pelham-Clinton).
- 1957 Gavinton, June 15-July 5 (A.G.L.) ; Gordon Moss, one July 20 (E. C. Pelham-Clinton).
- 1959 Gavinton, July 11.
- 1960 Gavinton, June 6 and 24.

Summary.—Generally distributed from the coast and the Tweed to the hills and fairly common. It comes to treacle and light from early June or late May, through July into early August.

133. *Diataraxia oleracea* Linn.

Bright Line Brown Eye. 284.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale, Addinston—common (A. Kelly, in *Lauder and Lauderdale*, p. 309).
- 1927 Very common everywhere (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 155).
- 1951 Pease Bay, several at sugar, June 16 ; Gordon Moss, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton, common at street lamps, June 17-July 12 (A.G.L.) ; Gordon Moss, many June 14 (E. C. Pelham-Clinton).
- 1953 Gavinton, May 28-August 7.
- 1954 Gavinton, July 17-August 4.
- 1955 Gavinton, June 11-August 9 ; Gordon Moss, July 18 ; Bell Wood, August 4 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gavinton, Hirsell, Retreat, Gordon Moss, Broomhouse, Bell Wood, Kyles Hill, Linkum Bay, Nab Dean, Old Cambus Dean, Burnmouth, Pettico Wick, Aiky Wood, May 22-August 20. The specimens taken at Old Cambus on August 20 were fresh and probably represented a second brood.

- 1957 Gavinton, June 11-July 24.
 1959 Gavinton, July 10-August 11.
 1960 Gavinton, abundant in m.v. trap, May 30, June 23 ;
 Birgham House, July 26 (Grace A. Elliot).

Summary.—Very abundant and widespread. It emerges at its earliest towards the end of May and continues through June and July. A partial second brood may occur in August.

*134. *Hadena suasa* Schiff. (*dissimilis* Knoch).

Dog's Tooth. 287.

- 1902 Addinston Policy, rare (A. Kelly in *Lauder and Lauderdale*, p. 309).
 1927 Has been reported from Lauderdale (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 154).

Summary.—We have no recent records of this species in Berwickshire but Robson recorded it from Northumberland and from salt marshes in Durham where the larvæ occurred on *Plantago maritima* and *Statice limonium* (preferring the latter). It may occur therefore at the coast. South says that it also occurs inland on mosses.

135. *Hadena thalassina* Rott.

Pale Shouldered Brocade. 288.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1902 Lauderdale, fairly common (A. Kelly in *Lauder and Lauderdale*, p. 309).
 1927 Shaw took it commonly at sugar at Ayton and it occurs about Duns and other places (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 154).
 1951 Gordon Moss, several at sugar, June 30 (E. C. Pelham-Clinton).
 1952 Gavinton, common at street lamps, May 18-June 29.
 1953 Gavinton, May 24-June 21.
 1954 Gavinton, June 7-July 9 (A.G.L.) ; Pease Bay, June 26 ; Gordon Moss, June 27 (E. C. Pelham-Clinton).

- 1955 Gavinton, May 30-July 10 ; Oxendean Pond, June 4 ;
Kyles Hill, June 10 ; Gordon Moss, June 24-July 4.
1956 Gordon Moss, Gavinton, Hirsell, Retreat, Paxton Dean,
Broomhouse, Bell Wood, Linkum Bay, Kyles Hill,
Old Cambus Dean, May 14-July 18 (A.G.L. and
E. C. Pelham-Clinton).
1957 Gavinton, May 27-July 4.
1959 Gavinton, July 10 ; Birgham House, July 12 (Grace A.
Elliot).
1960 Gavinton, May 18 ; Birgham House, June 16-19
(Grace A. Elliot).

Summary.—A common species favouring wooded localities. It first emerges about mid-May and continues through June until about mid-July.

*136. *Hadena contigua* Vill. Beautiful Brocade. 289.

- 1874 Ayton—bred from a chrysalis found by S. Buglass
(W. Shaw, *H.B.N.C.*, Vol. VII, p. 237 ; also G.
Bolam, *H.B.N.C.*, Vol. XXVI, p. 262).
1902 Airhouse Wood, not common (A. Kelly in *Lauder and
Lauderdale*, p. 309).

Summary.—This species is associated with oak, birch, bracken and bog-myrtle on heaths and moors and according to South is most common in the English midlands and parts of the Scottish Highlands. It seems possible from the above two records that it may be awaiting re-discovery in Berwickshire but if so it is probably very scarce and local. The imago flies in June and the larva can be found in August and September.

137. *Hadena trifolii* Rott. Small Nutmeg. 290.

- 1902 Lauderdale, one, rare or overlooked (A. Kelly in *Lauder
and Lauderdale*, p. 309).
1927 Bolam knew of no other Berwickshire record (G.
Bolam, *H.B.N.C.*, Vol. XXVI, p. 156).
1956 Duns, one on a lamp standard, September 6.
1960 Gavinton, two in m.v. trap, August 3 and 15 (A.G.L.).

Summary.—According to Baron de Worms this is an abundant insect in the London area but elsewhere it is local, and rare in the north and in Scotland. According to Robson it is rare in Northumberland and Durham and Harper says it is rather uncommon in Inverness-shire. So far we have no records of the early brood which appears in May and June. As the larva feeds on *Chenopodium* the moth should occur at the coast as well as inland.

138. *Hadena bombycina* Hufn. (*glauca* Hübn.).

Glaucous Shears. 291.

- 1874 Addinston, one disturbed among nettles (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233, also *Scot. Nat.*, Vol. III, p. 64).
- 1902 Lauderdale, very rare (A. Kelly in *Lauder and Lauderdale*, p. 309).
- 1927 Apparently rare or very local (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 155).
- 1955 Kyles Hill, at m.v. light, May 24 and 27; Cockburn Law, one female taken during the day, May 30, it laid about 100 eggs but all the larvæ succumbed to virus disease.
- 1956 Kyles Hill, one fresh specimen at m.v. light, May 18; three, about midnight, in Quarry, May 23; two more on June 21 at the same spot (A.G.L.); Gordon Moss, one at m.v. light, June 11 (E. C. Pelham-Clinton).
- 1957 One emerged on May 19 reared from a larva found on heather at Kyles Hill in the previous summer; Gavinton, one in m.v. trap, May 29.

Summary.—It is probable that this species is more widely distributed on our heather moors than the records show. The imago starts to emerge about mid-May and continues until late June. It sits on rocks and walls by day and comes readily to m.v. light. The larva feeds on heather in July and August.

139. *Hadena nana* Hüfn. (*dentina* Esp.). Shears. 292.

- 1873 Lauderdale (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
 1879-80 Ayton Castle garden (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1880 Gordon Moss (R. Renton, *ibid.*, p. 296).
 1902 Lauderdale, fairly common Addinston, on raspberries (A. Kelly in *Lauder and Lauderdale*, p. 309).
 1913 St. Abb's Lighthouse, three July 12, 1913 (W. Evans, *Scot. Nat.*, 1914, p. 282).
 1927 Not rare though perhaps somewhat local. Shaw got a few at Eyemouth. Flies in sunshine (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 156).
 1954 Greenlaw Moor, one worn specimen flying by day, July 11.
 1956 Kyles Hill, one at m.v. light, June 21; Bell Wood, several at m.v. light, June 23 and July 10.
 1957 Gavinton, one in m.v. trap, June 21.

Summary.—Widely distributed but somewhat local and partial to high ground. It emerges about the third week in June and continues well into July.

140. *Hadena conspersa* Esp. (*nana* Rott.).

Marbled Coronet. 296.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1877 Ayton, two (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322).
 1902 Lauderdale, on ragged robin, rare, Addinston Policy (A. Kelly in *Lauder and Lauderdale*, p. 308).
 1911-13 St. Abb's Lighthouse, one May 25, 1911; one July 27, 1911; one July 12, 1913; eight June 4, 1914 (W. Evans, *Scot. Nat.*, 1914, p. 281).
 1927 Often numerous from Lamberton to Cockburnspath (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 159).
 1951 Pease Bay, one on wing at dusk, June 16 (E. C. Pelham-Clinton).
 1956 Hirsell, one at m.v. light, June 29; Linkum Bay, several at m.v. light, June 30 (A.G.L.).
 1960 Birgham House, at m.v. light, May 14 (Grace A. Elliot).

Summary.—Most abundant at the coast and along the Tweed valley. Larvæ feed in capsules of *Silene maritima* and *S. vulgaris*. The imagines start to emerge about mid-May and continue through June until near the end of July.

141. *Hadena bicruris* Hüfn. (*capsincola* Hübn.).

Lychnis. 299.

- 1872 Preston, two at White Champion (J. Anderson, *H.B.N.C.*, Vol. VI., p. 398).
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII., p. 123).
- 1902 Lauderdale, the most common on *Lychnis vespertina* (White Champion) (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 The most common and best distributed of the genus (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 159).
- 1953 Gavinton, four at flowers of Red Champion, May 31-July 6 (A.G.L.).
- 1954 Pease Bay, two at dusk, June 26; Gordon Moss, one at light (E. C. Pelham-Clinton).
- 1955 Oxendean Pond, at m.v. light, June 4; one emerged from pupa, July 6; Gavinton, one at m.v. light, July 25.
- 1956 Gavinton, Retreat, Broomhouse, Hirsell, Old Cambus Dean, Gordon Moss, several at m.v. light, May 26-July 22 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, June 2 and 21.
- 1959 Gavinton, August 7 and 18; Birgham House, July 22 and August 26 (Grace A. Elliot).
- 1960 Gavinton, several, May 22-June 25.

Summary.—Widely distributed and common. Imagines begin to emerge about the last week of May and continue through June into late July. In hot summers there may be a partial second brood in August. The larvæ are readily collected by gathering the capsules of Red and White Champions in July.

142. *Hadena cucubali* Fuessl. Campion. 300.

- 1874 Preston, one from larva found in capsule of Scarlet Lychnis (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231); Broomhouse, not uncommon at Bladder Campion on waterside (A. Anderson, *ibid.*, p. 232).
- 1877 Cleekhimin, one (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321); Eyemouth, one on banks of R. Eye (W. Shaw, *ibid.*, p. 323).
- 1892 One from larva got on Whitadder (G. Bolam, *H.B.N.C.*, Vol. XV, p. 306).
- 1902 Lauderdale, a lovely insect (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 Fairly common but not plentiful. It occurs regularly on the sea-banks at Eyemouth and elsewhere also on Whitadder banks from Edrington to Preston (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 159).
- 1955 Gavinton, July 8; Gordon Moss, July 12, 18 and August 2, all at m.v. light (A.G.L. and E. C. Pelham-Clinton).
- 1956 Nab Dean Pond, one, July 7; Gordon Moss, four, July 18, all at m.v. light (A.G.L.).

Summary.—Widely distributed but much less common than *H. bicruris*. It flies throughout July and into August.

*143. *Hadena lepida* Esp. (*carpophaga* Borkh.).

Tawny Shears. 301.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Broomhouse, one (A. Anderson, *ibid.*, p. 232).
- 1902 Lauderdale, once very common (A. Kelly, in *Lauder and Lauderdale*, p. 308).
- 1927 Plentiful on the Berwickshire coast (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 158).
- 1932-34 Larvæ common at Cockburnspath (D. A. B. Macnicol).

Summary.—Most of the records come from the coast where the larvæ occur in the capsules of the sea campion and bladder campion during July and August. The imago flies in May and June but is also said to have a second brood.

144. *Hadena serena* Fabr. Broad Barred White. 304.

- 1874 Eyemouth, two on Valerian and one at Ayton (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236) ; Broomhouse, one (A. Anderson, *ibid.*, p. 232).
- 1902 Lauderdale, in gardens at flowers, easily seen (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 Shaw got it at Ayton in 1874 and later took it on Eyemouth sea-banks. Adam Anderson had a nice series from Broomhouse taken from 1874-1895. By 1879 Robert Renton was getting it occasionally about Fans (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 158).
- 1956 Gavinton, one in m.v. trap, June 21.

Summary.—The records suggest that this species is probably established over a wide area but is not very common. The imagines fly in June and July and the larvæ feed in the flower heads of Smooth Hawksbeard (*Crepis capillaris*), Sow Thistle (*Sonchus* spp.) and Mouse-ear Hawkweed (*Hieracium pilosella*) in August.

*145. *Heliophobus albicolon* Hübn. White Colon. 306.

- 1902 Lauderdale. "This is the rarest capture for Berwickshire. It stands unique in the history of its Lepidoptera, and what makes it more pleasing, is the fact that it was captured in the beautiful Vale of Leader" (A. Kelly in *Lauder and Lauderdale*, p. 305).
- 1927 Bolam knew of no other record (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 156).

Summary.—This is a coastal species frequenting sandhills so that it is more likely to be found in East Lothian or Northumberland. The imago flies in May and June.

BOTANY

Notes compiled by A. G. LONG.

During 1960 Berwickshire was favoured with a visit of over twenty members of the Botanical Society of the British Isles. From Saturday, July 31 to Saturday, August 6, the party had their headquarters at the Black Bull Hotel, in Duns, where they met each evening, from 8-10 p.m., to discuss and record the species of plants found on the day's excursion.

The party was under the leadership of Dr. F. H. Perring of the University Botanic Garden, Cambridge. Dr. Perring is Director of the Distribution Maps Scheme. He was assisted by Dr. J. G. Dony, of Luton, General Secretary of the B.S.B.I., and author of *The Flora of Bedfordshire*. Assisting with the necessary arrangements was the Field Secretary, Mr. P. C. Hall and Mrs. Hall, of Erith, Kent. Other members taking an active part were Miss E. P. Beattie of Edinburgh, Miss E. I. Biggar of Castle-Douglas, Dr. and Mrs. G. A. Swan of King's College, Newcastle, Mr. E. B. Bangerter of the British Museum, Miss L. W. Frost (working on the flora of Hampshire) and Mr and Mrs. R. C. L. Howitt (working on the flora of Nottingham).

Each day the party split into small groups with the object of working a specific area—usually a 10 km. square or part square of the National Grid. In this way all the twenty-three squares or part squares in Berwickshire were visited, most of them more than once by different parties of botanists who knew what species had been recorded previously. The local members present on many of these excursions were able to help as guides by reason of their local knowledge.

Of the many species of plants recorded the following are some of the more interesting.

Selaginella selaginoides. Near Foul Burn Bridge.

Dryopteris lanceolatocristata. On Penmanshiel Moss and Everett Moss.

Papaver argemone. Near Gunsgreen, Eyemouth.

- Fumaria muralis* ssp. *boraei*. Fumitory.
- Lepidium heterophyllum* (Smith's Cress) on the railway, Oxtou.
- Hypericum humifusum*. Field behind Burnmouth School.
- Silene noctiflora*. Arable field near Fireburn Mill.
- Sagina ciliata*. Coast near Fancove Head.
- Cerastium atrovirens*. Hume Castle.
- Geranium lucidum*. Banks of Blackadder near Greenlaw.
- | | |
|--------------------------|---------------------------------------------------------------------------------------------------------------|
| <i>Trifolium arvense</i> | } On road below Hare Law Craigs at edge of plantation (probably introduced with stone used to make the road). |
| <i>T. striatum</i> | |
| <i>T. scabrum</i> | |
| <i>Vicia lathyroides</i> | |
- Peplis portula*. Dowlaw Pond.
- Scandix pecten-veneris*. Arable field above Ross near Burnmouth.
- Apium nodiflorum*. Horse Bog, Birgham, in ditch.
- Apium inundatum*. Foul Burn Bridge; Kippettlaw Burn; Dowlaw Pond.
- Rumex palustris*. Legerwood Pond.
- | | |
|-------------------------|-----------------------------|
| <i>Myosotis secunda</i> | } Byrecleugh and elsewhere. |
| <i>M. caespitosa</i> | |
- Scrophularia umbrosa*. This is a common waterside Figwort in Berwickshire.
- Lamium moluccellifolium*. Arable weed, Mordington Mains and Fancove Head.
- Plantago media*. Tweedside near Fireburn Mill.
- Senecio fluviatilis*. Paxton House in dean above bridge.
- Anthemis cotula*. Swinton.
- Carlina vulgaris*. Fleurs Dean.
- Cicerbita plumieri*. A garden escape, Leitholm, Gavinton and elsewhere.
- Butomus umbellatus*. Allanton Bridge; Blackadder, below Nesbit.
- Potamogeton filiformis*. Pond above Pettico Wick.
- Zannichellia palustris*. Langton Burn, near mouth.
- Juncus acutiflorus*. Common.
- Listera cordata*. Hule Moss.
- Gymnadenia conopsea* ssp. *densiflora*. Fleurs Dean.
- Dactylorchis purpurella*. Crooked Burn Foulden.
- Acorus calamus*. Pond near Foulden New Mains.

- Scirpus setaceus*. Behind Oxendean Pond ; Kippetlaw Burn.
Eleocharis quinqueflora. North-west of Linkum Bay on coast.
Schoenus nigricans. Near Gunsgreen.
Carex disticha. Crooked Burn ; Kippetlaw Burn ; Foul Burn Bridge.
Melica uniflora. Blackburn Rig Dean.
Helictotrichon pratense. Sea braes near Ross.
CORRECTION.
Chenopodium polyspermum. Recorded for Duns Railway (Vol. XXV. p. 85) was a form of *C. album*.

ORNITHOLOGY

Observations during 1960 by F. BRADY, M.Sc., Lieut.-Colonel W. M. LOGAN HOME, M.B.O.U., A. G. LONG, M.Sc., and W. MURRAY.

- Common Scoter*. Two were seen on Primrosehill Pond on November 27 (W.M.).
Snow Goose (probably *Greater*). One on Hule Moss, December 13-19, among 3,000 Pink Footed Geese (W.M.L.H.).
Pink Footed Geese. On April 28, from moors north of West-ruther between 3 and 6 p.m., three skeins of 50 + 75 + 140 birds were seen flying N.E. from Melrose direction. Over Hule Moss they broke formation then re-formed and flew steadily W.N.W. until out of sight. It looked as though they were checking on a well-known landmark (F.B.).
Buzzard. A pair have been in the Hule Moss, Hardens and Whitechester area for about 2 years now. A pair were trapped in a large crow trap in the Spring at Rigfoot by the gamekeeper who later released them after he had asked Mr. A. Cowieson to come and see them (W.M.).
'Ringtail' Harrier (probably immature *Hen Harrier*) was hunting over the *Spartina* beds on Fenham Flats on September 18 (F.B.).
Green Sandpiper. One flew over Preston in a westerly direction about August 23 (W.M.).
Little Stint. Unusually abundant in September at Holy Island Flats (F.B.).

Barn Owl. A dead specimen was found on the A1 road at the Bilsdean junction near Cockburnspath, December 23 (A.G.L.).

Little Owl. Is still spreading slowly in N. Northumberland. A new locality was found near Kylvie Woods (F.B.) A pair again nested near Lintlaw rearing 3 young. Another pair was located nearby but no nest was found (W.M.).

Tawny Owl. A dead specimen was found on the Westruther road between Camp Moor and Foul Burn Bridge on April 12 by A.G.L. It had been ringed as a nestling on 21.5.58 by W.M. near Duns.

Stonechat. Several records in January and February in the area just S. of Berwick but no breeding recorded (F.B.).

Chiffchaff. One seen and heard at the Linn Burn near Paxton House on April 9 (A.G.L.).

Pied Flycatcher. Seven pairs took up nest sites at Paradise below Cumledge, one male had returned for the fifth successive season. All the nests together with those of tits and tree sparrows were destroyed by a stoat and Greater Spotted Woodpecker (W.M.).

Grey Wagtail. One seen at Crooked Burn, Foulden, on December 24 (A.G.L.).

Waxwing. Two seen at Coldingham by Mr. J. Robertson on November 9 (W.M.).

ENTOMOLOGY

Observations during 1960 by GRACE A. ELLIOT, A. G. LONG, S. McNEILL
and Lieut-Colonel W. M. LOGAN-HOME.

Name.	Date.	Place.	Remarks.
Oak Beauty (<i>B. strataria</i>)	23.3.60	Birgham	One in village (G.A.E.).
Streamer (<i>C. derivata</i>)	9.5.60 10.5.60 and 22.5.60	Gavinton Nabdean and Paxton Lodges	One in m.v. trap (A.G.L.). Four (S.McN.).
Muslin (<i>C. mendicus</i>)	17.5.60 and 21.5.60	Birgham House	Two at m.v. trap. <i>First Berwickshire Records</i> (G.A.E.).
Least Black Arches (<i>C. confusalis</i>)	14.5.60	Birgham House	At m.v. trap (G.A.E.).
Scarce Tissue (<i>C. cervinalis</i>)	22.5.60 and 31.5.60	Gavinton	Three at m.v. trap (A.G.L.).
May Highflyer (<i>H. coerulata</i>)	2.6.60	Birgham House	At m.v. trap (G.A.E.).
Small Clouded Brindle (<i>A. unanims</i>)	11.6.60	Tweed banks at Paxton	One (S.McN.).
Tawny Barred Angle (<i>S. liturata</i>)	26.6.60	Near " The Cottage " Paxton	One (S.McN.).
Dark Spectacle (<i>A. triplasia</i>)	1.7.60 and 3.7.60	Birgham House	Four at m.v. trap ; rare (G.A.E.).
Fanfoot (<i>Z. tarsipennalis</i>)	3.7.60 and 23.7.60	Birgham House	Two at m.v. trap (G.A.E.).
Yellow Tail (<i>E. similis</i>)	26.7.60	Birgham House	One, <i>First Berwickshire Record</i> (G.A.E.).
Speckled Wood (<i>P. aegeria</i>)	9.7.60 11.9.60	Clarabad Hutton Bridge and Clarabad	One. Several (S.McN.).
Small Fan-footed Wave (<i>S. biselata</i>)	20.7.60	Lithtillum Edrom House	Two (A.G.L.). One (W.M.L.H.).

Name.	Date.	Place	Remarks.
Red Admiral (<i>V. atalanta</i>)	10.8.60	Gavinton	Two fully grown larvae, produced imagines in in Sept. (A.G.L.).
Olive (<i>Z. subtlusa</i>)	19.8.60	Birgham House	One at m.v. trap (G.A.E.).
Old Lady (<i>M. maura</i>)	19.8.60	Paxton House Gardens	One (S.McN.).
Hedge Rustic (<i>T. cespitis</i>)	22.8.60	Birgham House	One (G.A.E.).
Blood Vein (<i>C. amata</i>)	26.8.60	Birgham House	One second-brood speci- men <i>first record for</i> <i>eastern borders</i> (G.A.E.)
Blue Bordered Carpet (<i>P. bicolorata</i>)	26.8.60 28.8.60	Nabdean Curling Pond.	Two (S.McN.).
Orange Sallow (<i>T. citrargo</i>)	25.8.60	Paxton Lodges	One (S.McN.).
Peacock (<i>N. io</i>)	13.9.60 18.9.60	Paxton House Gardens	Four (S.McN.).
Sallow Kitten (<i>C. furcula</i>)	18.9.60	Hule Moss	Two larvae on <i>Salix</i> west of small loch. (W.M.L.-H.).
Convolvulus Hawk (<i>H. convolvuli</i>)	18.9.60	Tiendhill Green, Duns	One (dead) reported by G. Grahame.
Gold Spot (<i>P. festucae</i>)	17.6.60 18.9.60 22.9.60	Paxton Lodges	Some second-brood specimens (S.McN.).
Water Scorpion (<i>Nepa cinerea</i>)	19.8.60	In Tweed at mouth of Horndean Burn	On <i>Potamogeton</i> (one) (A.G.L.).

REPORT ON MEETING OF BRITISH ASSOCIATION AT CARDIFF, 1960.

By Mrs. M. H. McWHIR.

The British Association for the Advancement of Science in September, 1960, was held in Cardiff.

The first meeting of the Association ever held in this City was in 1891, the second in 1920. Forty years later the 122nd Conference was held in the capital of the Principality of Wales.

Cardiff, although it wears a very modern aspect and is the home of a great variety of industrial enterprises, has an ancient history which can be traced back to Roman and Norman times. These ancient days leave a deep imprint on the surrounding countryside.

A visit to this City is a revelation, coming as one does with the preconceived idea of a town blackened by industry, with a smoke begrimed atmosphere. Instead, the eye meets beautiful buildings set in the midst of lovely parks. Added to all this, the Castle, stands in medieval grandeur, still keeping "watch and ward" in the city centre in its silvan setting. The flag-bedecked town with its lovely old trees decorated with coloured lights everywhere, give a fairy-like setting and banishes altogether the preconceived idea of beauty defaced by industry.

Across a busy thoroughfare was strung a huge banner bearing the words in Welsh (CROESO GARRDYDD) Welcome to Wales.

Great efforts have been made these last 30 years to counteract the result of the prolonged depression, and truly the results are marvellous.

At the inauguration ceremony held the first evening, the Mayor of Cardiff welcomed the Association to the City. Thereafter, the President, Sir George Thomson, gave his Presidential Address entitled, "The Two Aspects of Science." Sir George said in the course of his address, that science is already valued for what it can do to increase man's control

over nature. It begins by studying details which appeal to human curiosity. He closed his address by saying that science is not merely the control, but also the understanding of nature—its two aspects must be held in equal honour.

The 1960 lectures were as varied as in years past. Mr. A. B. Oldman Davels, C.B.E. Controller of Wales, B.B.C. took as his theme, as President of the Correspondence Society, "Science Broadcasting in Sound and Television." He commenced by saying that he regarded the invitation to preside over this section this year, as a great compliment to the work of the B.B.C. In the course of his Address he said, that in this field to some extent Science Broadcasting can be regarded as an ally of the British Association—he said it was his task to show that this was so with the B.B.C. which showed the tremendous debt we owe to scientific advances applied to the satisfying of human needs.

The young members of the Association, some 600 strong, many of whom were still at School, were greatly interested by a lecture given by Sir James Gray, last year's President, at York. This address was on the "Flight of Birds." Sir James was introduced by Mr. R. E. Presswood, Director of Education for Cardiff.

The young members' programme included the Science in School Exhibition and lectures each afternoon in the Great Hall of the College.

Special emphasis was placed on world food and population problems during this most interesting week. The Exhibition held in University College was of especial interest ; it showed that there are almost 3,000 million people in the world to-day and stressed the fact that agricultural and industrial production will have to be increased very considerably to satisfy the ever growing need of the earth's peoples. We were told that more capital investment in agriculture and industry is vital.

This year the seriousness of this gigantic "World Food Problem," caused the Scientists to devote a whole day to try and work out a plan whereby this most pressing need can be met, and to show the undeveloped areas how to get the most use from their land, so that in time they could become quite independent of the west. Such help might eventually repre-

sent not only sound morality but also good business.

In the H Section, lectures on the Long Houses of the 16th and 17th centuries proved most interesting, showing us that during the last 10 years examples of these dwellings have been discovered in all parts of the country. These evidently were the normal type of house in these far off days.

A visit to Cardiff Castle was intensely interesting. The Castle is built on the site of a Roman Fort A.D. 75 and there is still a skeleton of this Roman structure remaining in the Castle grounds to this day, and towering in the background is a Norman Fort. This Medieval Castle was not only a place of defence, it was also the centre of government for Glamorgan. Many noble families, famous in the history of our country, have by marriage or by direct descent, succeeded to this Castle. The Gloucester family in the 12th Century, the Clares in the 13th and eventually in 1713 it passed to Thomas, Viscount Windsor, by his marriage with the Pembroke heiress in 1766. John Mount Stuart created Marquess of Bute in 1796 married Charlotte Windsor and thereby succeeded to the property. The Castle remained in the Bute family until 1948 when with some reservations, it was handed over as a gift to the Corporation of Cardiff, for the benefit of the citizens. The beauties of the interior of this ancient castle have to be seen to be believed. The ceilings are richly gilded with 22 carat gold leaf and many of the chimney-pieces are of beautiful white marble inset with blue lapis-lazuli. A fireplace in the banqueting hall with its over-mantle is a representation of the gate of the castle. The owner is depicted riding forth to take part in a struggle concerning the succession to the English throne of that time. His Countess is waving a handkerchief, obviously wishing the warrior God-speed. Six heralds proclaim the departure of their Lord and behind the bars of a small grille we see his uncle, Robert, Duke of Normandy, who was held a captive at Cardiff Castle from 1126 until his death in 1134. A beautiful chandelier hangs in the entrance hall, gilded with 22 carat gold leaf—it must look magnificent when lit.

These are only a very few of the glories of this most wonderful Castle set right in the centre of this busy City of Cardiff.

Another enthrallingly interesting visit was paid to St.

Fagons Welsh Folk Museum ; The Earl of Plymouth's generous gift to Cardiff of this St. Fagons Castle and grounds, made this museum possible. There are a 100 acres of land. The Castle dates from Norman times and is furnished throughout in 16th Century style. In the grounds, we see a farm-house a woollen mill, a barn, a tiny chapel and an ancient gipsy caravan, all re-erected in these beautiful surroundings, making a visit to this unique museum a source of great interest to those who come from far and near.

An all day excursion to the Brecon country was most enjoyable. On the way we visited the Faf. Fawer Waterworks. At the beginning of the 19th century there was no piped water in Cardiff. Consequently a serious epidemic of cholera occurred in 1849 and we are told one person in every 50 died. This grave state of affairs caused the Government to hold an inquiry into the sanitary conditions prevailing—this resulted in the formation of the Cardiff Water Co. Today Cardiff Corporation supplies 20 million gallons of water per day for domestic and trade purposes. The combined undertaking covers an area of 129 sq. miles and serves a population of 365,000 persons. We were shown the wonderful process by which this mighty volume of water is sterilised and filtered and conveyed to Cardiff by gravity. Two aqueducts carry this water some 30 miles to the service reservoirs situated in the distribution areas.

Through lovely country with magnificent vistas of distant hills, we continued our excursion. Far to the right were the Brecon Beacons with their three famous peaks. To the North on the horizon were the dim outlines of the Black Mountains. The towns were thick in the valleys as we passed along. The simple dignity of Brecon Cathedral and the charm of narrow streets and the sweeping lines of stately bridges as we sped along, made this all day outing with its varied experiences a most memorable one.

The last most interesting visit that day, was to Tree Tower Court. This ancient building is in the course of reconstruction to its former glory, by the Ministry of Works.

Thus, the busy days passed until the Sunday when the members of the Association gathered in Cardiff's beautiful Cathedral. The sun shone down on the various scientists as

they filed to their allotted seats led by the President, all in their colourful robes. In the absence of the Cathedral Choristers the Scholars of King's College, Cambridge, led the singing.

In his sermon the Bishop of Cardiff was concerned at the comparative standards of living enjoyed by the West, whereas the unlucky parts of the earth's peoples lived below subsistence level, he said moral laws are absolute, it is our awareness that is variable. There are still large quantities of food available especially in America, sad to say, going to waste annually, because no market exists for them. It should be possible for economists and Governments to work out a scheme whereby this food could be distributed to the countries most in need, without producing economic confusion.

At the conclusion of the service the procession left the Cathedral, while the huge congregation remained standing.

In the evening the B.B.C. presented a choral orchestral concert which was broadcast in the Welsh Home Service. The music was beautiful and the last item on the programme kept the audience spell-bound—it was the magnificent rendering of Psalm 135, "Praise Ye the Lord." At the last Meeting of the General Committee the President voiced the appreciation of all that had been done by the Mayor and Corporation of Cardiff, The University College, and in the Principality, to ensure the success of this 1960 Meeting. A special vote of thanks was accorded to all the citizens and all others whose unfailing kindness and interest had resulted in an outstandingly happy and rewarding meeting.

The City of Cardiff has surprised many members with its beauty, said Sir George Thomson. He said, "I was amazed by your city, and your countryside is equally attractive. What has struck one in the extraordinary kindness of the people. They have gone out of their way quite beyond normal expectations to take trouble". "For example", he said, "an expedition of 60 members visited a remote farm house in the Welsh mountains and were all treated to tea". The British Association which ends today has been one of the most successful in its long history.

The 1961 Meeting is to be held at Norwich.

CORRECTIONS TO VOL. XXXIV.

- Page 4, line 3.* For Old Seton Collegiate Church read Seton Collegiate Church.
- line 5.* After Mr. S. H. Cruden add A.R.I.B.A., F.S.A., F.S.A.Scot., Inspector of Ancient Monuments for Scotland.
- Page 5, line 11.* For Mrs. C. M. Goddson, Kelso read Mrs. C. M. Goodson, Marlfield.
- line 14.* For nominated as Ordinary Members read admitted as Ordinary Members (see also page 6 lines 3 and 35, page 7 line 22 and page 8 line 6).
- Page 6, line 23.* For Miss Stein read Miss De Stein
- line 28.* For Stein family read De Stein family
- Page 7, line 6.* For Bastile read Bastle.

C.J.D.J.

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1960.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.						Days with Temperature at or below 32°.						Bright Sunshine.						
	Maximum.			Minimum.			Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknoves.	Hrs.		Days with Sun.				
	Whitchester.	Marchmont.	Duns Castle.	Manderston.	Swinton House.	Cowdenknoves.							Hrs.	Days with Sun.					
January	49	51	49	51	53	50	23	25	26	22	23	20	29	37.4	16	43	20	35.9	18
February	57	59	54	60	60	52	16	17	19	13	15	8	14	84.9	25	64	26	82.3	25
March	55	58	53	60	59	54	25	26	27	25	27	20	23	63.5	19	56	17	61.6	17
April	61	61	60	69	65	63	30	32	31	27	27	25	7	141.8	25	74	24	122.5	26
May	68	69	70	77	71	71	29	33	33	29	30	28	1	193.2	24	152	29	176.0	24
June	73	77	74	83	77	81	39	43	45	41	44	39	...	235.1	30	188	27	175.6	28
July	67	68	68	75	72	80	41	44	44	43	42	38	...	139.2	28	140	29	129.5	28
August	69	71	68	76	72	72	40	42	44	41	41	36	...	161.9	26	120	28	133.3	27
September	65	68	61	73	70	68	38	39	42	34	39	34	...	122.9	25	117	25	120.1	25
October	59	60	59	66	62	61	34	35	36	31	34	28	3	45.9	16	36	13	39.3	15
November	53	54	52	55	55	48	26	26	26	22	25	23	...	48.2	17	42	19	53.6	19
December	51	50	48	51	51	50	25	25	26	23	25	20	17	59.8	23	56	24	55.9	20
Year	73	77	74	83	77	81	16	17	19	13	15	8	67	1333.8	274	1088	281	1185.6	272

RAINFALL IN BERWICKSHIRE DURING 1960.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	St. Abb's Head.	Tweed Hill.	Whitchester.	Duns Castle.	Manderston.	Kimmerghame	Swinton House	Lochton.	Marchmont.	Cowdenknowes.	Duration.*
											Swinton House.
Height above sea-level - -	245'	50'	838'	500'	353'	300'	200'	150'	498'	300'	Hours
Month											
January - -	3.21	3.96	4.84	4.12	5.08	3.65	3.85	3.67	4.77	3.44	127.7
February - -	1.41	2.27	2.67	1.52	2.45	3.50	2.35	1.93	2.31	3.23	36.5
March - - -	.95	1.34	1.53	1.30	1.53	1.50	1.23	1.33	1.88	1.68	43.7
April - - -	.99	.57	1.28	1.16	.91	.90	.66	.80	1.32	1.50	17.5
May - - -	1.84	1.76	1.03	1.76	1.83	1.75	1.58	1.27	1.35	2.30	18.7
June - - -	.76	1.55	.92	1.09	1.20	2.25	.98	1.05	1.08	.95	22.6
July - - -	2.67	4.07	3.96	4.28	3.63	3.90	3.55	2.89	3.41	3.51	58.9
August - - -	3.17	3.06	3.93	3.33	5.52	4.25	3.37	4.12	3.44	4.02	53.1
September - -	1.75	2.57	2.19	2.00	2.95	1.77	1.75	1.41	1.77	1.35	38.4
October - - -	2.57	5.96	8.94	6.45	8.53	7.25	5.75	5.37	7.86	4.75	111.0
November - -	1.50	2.26	3.26	2.39	2.85	2.60	2.39	2.10	2.40	3.50	45.8
December - -	2.20	1.85	2.74	2.27	2.39	2.15	1.91	1.72	2.18	3.55	52.3
Year - - -	23.02	31.22	37.29	31.67	37.97	35.47	29.37	27.66	33.77	33.78	609.3

* Number of hours for which rain fell at a rate of .004 inches or more.

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1960.

RECEIPTS		PAYMENTS	
<i>Credit Balance at September 20th 1959</i>	£39 0 2	<i>History for 1959 (Martins)</i>	£190 6 0
<i>Subscriptions</i>		<i>Index (Neill)</i>	70 2 0
Annual	£418 10 0	<i>Printing and Stationery</i>	
Junior	3 0 0	Printing Notices (Neill) (2)	£15 4 0
Entrance Fees	33 10 0	Printing Notices (Martins) (5)	26 3 6
Arrears	36 5 0	Making Stencils (Martins)	20 10 0
		Stationery (Martins)	5 7 6
	491 5 0		67 5 0
<i>Sale of Club Badges</i>	7 7 6	<i>Sundry Expenses</i>	
<i>Received from Librarian for Sale of Histories</i>	1 11 4	Antiquity Magazine	1 10 0
		Insurance Premium	2 2 0
		Rent of Books in Library	1 0 0
		Bank charges and Cheque Book	19 3
			5 11 3
		<i>Subscriptions</i>	
		Assoc. Preservation Rural Scotland	1 1 0
		S.R.G. British Archaeology 2 years	4 0 0
		Chillingham Wild Cattle	1 1 0
		British Association	2 2 0
			8 4 0
		<i>Officials Expenses</i>	
		Secretary (W.R.E.)	26 13 9
		Ed. Secretary (A.A.B.)	4 0 0
		Treasurer (T.P.)	5 7 6
		Delegate to British Association	10 0 0
			46 1 3
		Honorarium to Secretary for Years 1957, 1958, 1959	50 0 0
		Credit Balance at Bank September 20th 1960	101 14 6
	£539 4 0		£539 4 0

BALANCE SHEET.

<i>LIABILITIES</i>			<i>ASSETS</i>		
Carried from General Account	...	...	£101	14	6
Investment Account	...	...	Cash in Bank		
Balance at 20/9/59	...	£187 15 5	National Commercial Bank	...	£101 14 6
Interest added	...	4 11 5	Trustee Savings Bank	...	192 6 10
					<u>£294 1 4</u>

FLODDEN FIELD MEMORIAL FUND.

Balance at 20/9/59	...	47 15 0			
Interest added	...	0 7 7			
			48	2	7
			<u>£48</u>	<u>2</u>	<u>7</u>
			Cash in Bank	...	£48 2 7

Berwick-on-Tweed, 7th October, 1960. Audited and found correct.

(Signed) P. G. GEGGIE, Hon. Auditor.



THE BERWICKSHIRE NATURALISTS' CLUB RULES AND REGULATIONS.

(Founded September 2nd, 1831.)

BADGE : WOOD SORREL.

MOTTO : " MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM."

1. The name of the Club is The Berwickshire Naturalists' Club (1831).
2. The object of the Club is to investigate the natural history and antiquities of Berwickshire and its vicinity (1831).
3. All interested in these objects are eligible for membership (1831).
4. The Club consists of (a) Ordinary Members, (b) Junior Members, (c) Contributing Libraries and Societies, (d) Corresponding Members, eminent men of science whom the Club desires to honour (1883), (e) Honorary Lady Members, (f) Associate Members, non-paying members who work along with the Club (1883), and (g) a limited number of Life Members.
5. New members are elected at any meeting of the Club by the unanimous vote of members present, the official forms having been duly completed, and the nominations having been approved by the officials of the Club. New members are entitled to the privileges of membership upon payment of the entrance and membership fees (1922), concerning which they will be duly notified (1937). If elected in September such member is eligible to attend the Annual Meeting for the year, no

fees being due before 1st January (1937). The names of new members who have not taken up membership within six months of election, and after having received three notices, will be removed from the list (1925). The Club rules and list of members at date are sent on election (1937).

6. The entrance fee is 20s. (1937), and the annual subscription 25s. (1954). These are both due on election. Subsequent subscriptions are due after the annual business meeting, and entitle members to attend the meetings and to receive a copy of the Club's *History* for the ensuing year (1925). No fees or subscriptions should be sent until requested by the Treasurer (1937).
7. The number of Ordinary Members is limited to 400. The names of candidates are brought forward in priority of application, power being reserved to the President to nominate independently in special cases, irrespective of the number of members on the Roll (1884).
8. The *History* of the Club is issued only to members who have paid their year's subscription. Names of members who are in arrears for two years will be removed from the list after due notice has been given to them (1886).
9. The Club shall hold no property (1831), except literature (1906).
10. The Office-Bearers of the Club are a President, who is appointed annually by the retiring President; a Vice-President (1932), an Organising Secretary, an Editing Secretary, two Treasurers (1931), and a Librarian, who are elected at the annual business meeting (1925), and who shall form the Council of the Club (1931); with in addition one lady and one gentleman co-opted by the Council as members of the Council and one member (lady or gentleman) co-opted by the Council specially to deal with Natural History subjects (1948) as member of the Council, to serve for the ensuing year; they will retire at the Annual Meeting, but being eligible can offer themselves for re-election (1937).

11. Expenses incurred by the Office-Bearers are refunded. The Secretary's expenses, both in organising and attending the meetings of the Club, may be defrayed out of the funds (1909).
12. Five monthly meetings are held from May till September (1831). The annual business meeting is held in October. Extra meetings for special purposes may be arranged (1925).
13. Notices of meetings are issued to members at least eight days in advance (1831).
14. Members may bring guests to the meetings, but the notices of meeting are not transferable (1925). Guests may only attend when accompanied by members (1937).
15. At Field Meetings members should hand to the Secretary a card or slip with his or her name and the number of guests (no names) (1925 ; revived 1952).
16. At Field Meetings no paper or other refuse may be left on the ground. All gates passed through must be left closed (1925). No dogs are allowed (1932).
17. Members omitting to book seats for meals or drives beforehand must wait till those having done so are accommodated (1925).
18. Contributors of papers to the *History* receive five extra copies.
19. The Secretary must be notified of any suggested change in Rules not later than the 1st of September in each year, all members having not less than ten days' notice of such (1937).

" RULE FIRST AND LAST."

" Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken by any member without the unanimous consent of the Club "—(1849)—" Correspondence of Dr George Johnston," p. 414 (Founder and first President of the Club).

THE LIBRARY

A complete set of the Club's *History*, publications of kindred Societies, and other local and scientific literature, are now housed in a large bookcase in the Public Library, Marygate, Berwick-upon-Tweed. (See Notice on the case.) Parts of the Club's *History* are in charge of the Club Librarian, Mrs H. G. Miller, 17 Ravensdowne, Berwick-upon-Tweed, and may be obtained "only on loan" by application to her. Parts are also on sale to Members or Non-members at the following prices. Extra copies (above three) are, to Members, 3s. 6d. per part up to 1920; to Non-members, 6s. (1906). From 1921 to 1933, to Members, 6s.; to Non-members, 10s. (1921). From 1934 to 1947, to Members, 5s.; to Non-members, 7s. 6d. From 1948 until further notice, to Members, 7s. 6d.; to Non-members, 20s. (1921). Centenary Volume and Index, 10s. (1932). (When only one copy of year is in stock, it is not for sale.—F. M. Norman, Secy., 20/8/1906). Future prices to be adjusted by the Council from time to time in accordance with cost (1934).

THE PINK SLIP.

B.N.C., 1939.

1. Members are reminded that under Rule 15 no dogs are allowed at meetings.
2. Care should be taken that no paper or other refuse be left on the ground, and that wickets and gates be closed.
3. Smokers are requested to see that matches and cigarette ends are extinguished before throwing away, especially in woods.
4. During talks, members are asked to form a wide circle round the speaker, to enable everyone to hear.
5. When the attention of members is desired, the Secretary will sound the Horn.
6. The President's car (or car selected by the Secretary in his absence) will carry the Club Flag, and members are asked not to pass or get in front of this car, unless they are leaving the meeting.
7. Dr. Johnston's "Rule First and Last" — "Every member must bring with him good humour, good behaviour, and a good wish to oblige."

THE BERWICKSHIRE NATURALISTS' CLUB

LIST OF MEMBERS, 31st July, 1961.

Those marked with an Asterisk are Ex-Presidents.

LIFE MEMBERS.

	Date of Admission.
Dodds, Mrs A. M.; 7 Longstone View, Berwick-upon-Tweed .	1951

ORDINARY MEMBERS.

Adamson, Professor R. S., M.A., D.S.C.; The Brae, Jedburgh .	1961
Aikman, John S.; Jedneuk, Jedburgh	1939
Aitchison, Mrs A. L.; Tweedmount, Melrose	1930
Aitchison, Mrs B. H.; 15 Frogstone Road West, Edinburgh, 10 .	1919
Aitchison, Henry A.; Lochton, Coldstream-on-Tweed	1946
Aiton, Mrs Scott; Birkhill, Earlston	1936
Alexander, Miss K. J.; 32 Castle Drive, Berwick-upon-Tweed .	1960
Anderson, T. D.; 22 Newtown Street, Duns	1957
Anderson, T. MacMillar, M.D., F.R.C.P.E.; 17 Dundas Street, Edinburgh	1960
Askew, Major J. M.; Ladykirk House, Berwick-upon-Tweed .	1958
Ayre, Mrs V. M.; Marshall Meadows, Berwick-upon-Tweed .	1959
Baker, Mrs G. S.; 4 Devon Terrace, Berwick-upon-Tweed .	1956
Baker, Mrs J. K.; Temperance Terrace, Berwick-upon-Tweed .	1959
Barber, Anthony O.; Newham Hall, Chathill	1953
Barstow, Mrs Nancy; Wedderburn Castle, Duns	1947
Bayley, Miss H. M.; Hemsford, Kelso	1949
Bell, Miss I. Stuart, 18 East Street, Berwick-upon-Tweed .	1958
Bell, G. M.; Springfield, Tweedmouth, Berwick-upon-Tweed .	1958
Bennet, Hon. George W., M.A., F.B.H.I.; Polwarth Manse, Greenlaw	1953
Biddulph, Lady; The Pavilion, Melrose	1926
*Blair, C. H. Hunter, M.A., D.Litt., F.S.A.; 57 Highbury, Newcastle-upon-Tyne	1918
Blair, Miss A. L. Hunter; 57 Highbury, Newcastle-on-Tyne .	1957
Blake, Lady; The Dower House, Tillmouth, Berwick-upon-Tweed	1960
Bluitt, Mrs C. V. S.; Westdale, Wooler	1955
Bodenham, N. H.; The Barn, Snitter, Thropton, Morpeth .	1961
Bousfield, Mrs; Northfield, Lowick, Berwick-upon-Tweed .	1957
Bowlby, Mrs C.; Purves Hall, Greenlaw	1954
Boyd, Commander John G.; Whiterigg, St Boswells	1938

	Date of Admission.
Brackenbury, Charles H.; Tweedhill, Berwick-upon-Tweed . . .	1947
Brigham, Miss M.; 41 Northumberland Road, Berwick-upon-Tweed	1955
Broadbent, Miss E.; Tower Cottage, Norham-on-Tweed . . .	1955
Broadbent, H.; Greenhaven, Berwick-upon-Tweed . . .	1960
Broadbent, Mrs; Greenhaven, Berwick-upon-Tweed . . .	1960
Brooks, R.; Ednam House Hotel, Kelso . . .	1950
Brown, Mrs Ella C.; West Learmouth, Cornhill-on-Tweed . . .	1947
Bryce, T. H.; Westwoode, Gordon . . .	1949
Buglass, Miss A.; Swinton Bridgend, Duns . . .	1957
Buglass, Miss E. A.; 57 Castlegate, Berwick-upon-Tweed . . .	1960
Buist, A. A., W.S., F.S.A.Scot.; Kirkbank, Kelso . . .	1937
Buist, Mrs M. E.; Kirkbank, Kelso . . .	1937
Burns, Miss N. D.; 4 Tintagel House, Berwick-upon-Tweed . . .	1955
Butters, Mrs J. A.; 29 Castle Terrace, Berwick-upon-Tweed . . .	1958
Butters, J. A.; 29 Castle Terrace, Berwick-upon-Tweed . . .	1959
Calder, Mrs Dorothy F.; New Heaton, Cornhill-on-Tweed . . .	1946
Calder, Mrs Harriet G.; Billiemains, Duns . . .	1946
Carr, Miss M.; 7 Lovaine Terrace, Berwick-upon-Tweed . . .	1958
Carrick, Mrs Z.; 15 Cheviot Terrace, Coldstream.	1961
Chrisp, J. F. H., Low Trewitt, Thropton, Morpeth, Northumber- land	1958
Christison, Gen. Sir A. F. P., Bart.; The Croft, Melrose . . .	1949
Clay, Miss B. A. S. Thomson; 19 South Oswald Road, Edinburgh, 9	1939
Clennell, Miss Amy Fenwicke; Dunstan House, Alnwick . . .	1925
Cockburn, J. W.; Whiteburn, Grantshouse . . .	1925
Coning, Mrs M. M.; North Lyham, Chatton . . .	1955
Cowan, Mrs Allister; Eastfield, Bowden, Melrose . . .	1929
Cowe, Mrs I. C.; 22 Love Lane, Berwick-upon-Tweed . . .	1954
Cowe, William, F.S.A.Scot.; 3 Albert Place, Berwick-upon-Tweed	1955
Cowe, F. M.; 2 Love Lane, Berwick-upon-Tweed . . .	1958
Craw, H. A.; 30 Cranley Gardens, London, S.W.7 . . .	1933
Crombie, Miss M.; 9 St Helens, Spittal, Berwick-upon-Tweed . . .	1959
Curle, Mrs C. L.; Easter Weens, Bonchester Bridge, Hawick . . .	1960
Davidson, Miss I. R.; Cottage Hospital, Coldstream . . .	1958
Davidson, George E.; Beechknowe, Coldingham . . .	1946
Davidson, Miss A. E.; Beechknowe, Coldingham . . .	1961
Davidson, Miss H. C.; Kingswood, Windsor Crescent, Berwick- upon-Tweed	1954
Davidson, Mrs K.; Beal House, Beal . . .	1948
Davidson, Mrs M. I.; Horsley, Reston, Eyemouth . . .	1959
Dewar, Dr Robert H.; 8 Castle Terrace, Berwick-upon-Tweed . . .	1948
Dickinson, Miss G. I.; 21 Quay Walls, Berwick-upon-Tweed . . .	1961
Dickson, A. H. D., C.A.; Coldie Castle, Fossoyway, Kinross . . .	1925
Dickson, Miss Mary, 71 Gala Park Road, Galashiels . . .	1959
Dickson, Miss H. M.; Swinton House, Duns . . .	1955
Dixon-Johnson, Major C. J., T.D., F.S.A.Scot.; Middle Ord, Berwick-upon-Tweed	1946
Dixon-Johnson, Mrs M. D.; Middle Ord, Berwick-upon-Tweed . . .	1957
Dods, Mrs W. S.; 75 Ravensdowne, Berwick-upon-Tweed . . .	1958
Donaldson-Hudson, Miss R., F.R.Hist.S.; Dacre Tower, Naworth Castle, Brampton, Cumberland	1951
Douglas, Mrs W. S.; Mainhouse, Kelso . . .	1925

	Date of Admission.
Dudgeon, Mrs P. M.; Gainslaw Hill, Berwick-upon-Tweed	1954
Dykes, Mrs M. E.; Redheugh, Cockburnspath	1955
Edwards, G. A., Greenlaw Walls Lodge, Duddo	1960
Edwards, Mrs; Greenlaw Walls Lodge, Duddo	1960
Elder, Mrs E. S.; Summerhill Terrace, Berwick-upon-Tweed	1954
Elder, Mrs; Tweed Street, Berwick-upon-Tweed	1955
Elliot, Miss G. A.; Birgham House, Coldstream	1936
Elliot, W. R.; Birgham House, Coldstream	1936
Evans, Mrs H. M.; Cleadon, 13 Palace Street, Berwick-upon-Tweed	1949
Falconer, Mrs Agnes W.; Auchencrow Mains, Reston	1925
Findlay, Rev. D. F.; The Manse, Stichill	1957
Finnie, Rev. J. I. C.; Eccles Manse, Kelso	1953
Fleming, Miss B.; Kimmerghame, Duns	1957
Fleming, George J.; Greenwells, Lauder	1946
Fleming, Miss H. B.; Greenwells, Lauder	1947
Fleming, Mrs M. R.; Renton House, Grantshouse	1958
Fleming, Mrs D. F.; Struan, Berwick-upon-Tweed	1960
Forster, C. P., M.A.; 1 Quay Walls, Berwick-upon-Tweed	1934
Frater, Mrs J.; Goswick, Berwick-upon-Tweed	1957
Furness, Lady; Netherbyres, Eyemouth	1961
Fyall, James; Hillend, Reston	1954
Gallon, Lt.-Col. S. H., T.D.; St Duthus, Berwick-upon-Tweed	1960
Gibson, Miss E. M.; 23 Windsor Crescent, Berwick-upon-Tweed	1955
Gillon, Mrs N.; Abbey St Bathans, Duns	1949
Gilmour, Lady Mary; Carolside, Earlston	1950
Girling, W. Graham; Wreigh Close, Thropton, Morpeth	1957
Glahome, Mrs J. A.; Longstone View, Berwick-upon-Tweed	1938
Glen, Mrs J. K. T.; Houndwood, Reston	1955
Goodson, Lady; Kilham, Mindrum	1953
Graham, Mrs E. I.; Shellacres, Cornhill-on-Tweed	1952
Graham, Mrs R. R.; Marmion Cottage, Norham	1958
Grainger, D. I. Liddell; Ayton Castle, Ayton	1956
Grant, James G.; Hermitage, Kelso	1939
Gray, Mrs N.; St Aidans, Seahouses	1957
Gray, Thomas D.; 41 Ravensdowne, Berwick-upon-Tweed	1958
Gray, Mrs; 41 Ravensdowne, Berwick-upon-Tweed	1958
Gray, Mrs; East Reston, Eyemouth	1958
Grehan, Miss M.; Lingerwood, Beadnell Road, Seahouses	1958
Grieve, Miss Jessie C.; Castlewood, Pomathorn Road, Penicuik	1924
Grieve, Mrs J. M.; 27 Windsor Crescent, Berwick-upon-Tweed	1950
Gunn, Rev. Peter B.; The Manse, Ancrum, Jedburgh	1923
*Haddington, The Rt. Hon. The Earl of, K.T., M.C.; Mellerstain, Gordon	1947
*Haggerston, Captain Sir Hugh Carnaby de Marie, Bart.; Ellingham Hall, Chathill	1937
Hall, Mrs G.; Birchwood Hall, Chathill	1955
Hall, J. C.; Murmuran, Galashiels	1949
Hamilton, Mrs C. B.; Lowood, Melrose	1949
Hardie, Mrs E.; Sunnyside, Duns	1958
Hardy, Miss E; Summerhill, Ayton	1950
Harrison, Mrs B., M.B.E.; Levenlea, Selkirk	1937

	Date of Admission
Hastie, Alex; Ravelston, Chirnside	1937
Hay, Lieut.-Col. G. H., D.S.O.; Duns Castle, Duns	1956
Henderson, J. D.; Chester Dene, Belford	1937
Henderson, Mrs Joan, Kimmerghame Heugh, Duns.	1957
Henderson, Mrs Sybil, Drysdale, Dunbar	1955
Henderson, T. S.; Colville House, Kelso	1936
Herriot, David R.; West Croft, East Ord, Berwick-upon-Tweed	1948
Hinton, Mrs T. C.; Fulfordlees, Cockburnspath, Berwickshire	1958
Hislop, Mrs E.; New Haggerston, Beal	1957
Hogarth, George Gilroy; Springvalley, Yetholm, Kelso	1922
Hogg, Mrs; 2 Forrester Road, Edinburgh, 12	1959
Hogg, Mrs J. M.; 2 Bowmont, Dunbar	1956
Holderness-Roddam, Hon. Mrs Helen M. G.; Roddam Hall, Wooperton, Alnwick	1926
Holmes, Miss D. S.; 32a Bridge Street, Berwick-upon-Tweed	1953
Home, Major Hon. H. M. Douglas, M.B.E.; Old Greenlaw, Greenlaw	1957
Home, Lt.-Col. William M. Logan; Edrom House, Duns	1936
Home, Mrs D. L. Logan; Edrom House, Duns	1950
*Home, Sir John Hepburn Milne; Elibank, Walkerburn	1898
Home, Miss Sydney Milne; The Cottage, Paxton, Berwick-upon- Tweed	1924
Hood, James; Linhead, Cockburnspath	1932
Hood, T.; Townhead, Cockburnspath	1937
Horn, Mrs M.; Allerley, Melrose	1949
Horsburgh, Mrs E. M.; Hornburn, Ayton	1939
Howard, Mrs Mary L.; Greystone Cottage, Dunstan, Alnwick	1939
Hume, Miss F. E.; Hillview, Whitsome	1949
Hume, J. L.; British Linen Bank House, Duns	1949
Hunt, Mrs E. A.; Greenwell, Chirnside	1946
Hunter, Miss I. F.; Earsdon House, Belford	1958
Hunter, Miss V. E.; Low Middleton, Belford	1958
Hutchison, Mrs Mary M.; The Chesters, Lauder	1947
Hutchison, Miss C.; The Chesters, Lauder	1960
Jaboor, Mrs S. M.; Eildon House, Wooler	1961
James, Gilbert T.; Sandford, Bamburgh	1952
Jeffrey, Mrs R.; 49 Market Square, Duns	1960
Jobling, Mrs M. A.; Scremerston Town Farm, Berwick-upon-Tweed	1949
Jones, J. O.; Loanside, Lauder, Berwickshire	1955
Johnson, Miss Eva E. R., M.A.; 7 Marygate, Berwick-upon-Tweed	1937
Johnston, T. P.; 4 Palace Green, Berwick-upon-Tweed	1957
Johnston, Mrs E. S.; Palace Green, Berwick-upon-Tweed	1957
Keenlyside, Ronald; 10 Bondgate Without, Alnwick	1933
Keenleyside, Mrs N. E.; 10 Bondgate Without, Alnwick	1959
Kitcat, Mrs J.; Hirsell Law, Coldstream-on-Tweed	1950
Knight, Mrs W. A. T.; 1 Wellington Terrace, Berwick-upon-Tweed	1958
Knox, Miss A.; 44 Shielfield Terrace, Berwick-upon-Tweed	1957
Lawson, Mrs; 4 Scotts Place, Berwick-upon-Tweed	1958
Leadbetter, James G. G., W.S.; Spital Tower, Denholm	1931
Leadbetter, Mrs E. M. G.; Knowesouth, Jedburgh	1932
Leadbetter, Miss S.; Knowesouth, Jedburgh	1937

	Date of Admission.
Leather, Lieut.-Col. K. M. W.; Cheviot House, Castle Terrace, Berwick-upon-Tweed	1955
Leitch, J. S.; Longformacus, Duns	1948
Leith, Mrs W.; 20 The Meadows, Berwick-upon-Tweed	1958
Liddle, Mrs Alice; 3 Longstone View, Berwick-upon-Tweed	1956
Little, Miss D. D.; Crotchet Knowe, Galashiels	1960
Lindsay, John Vassie; Cornhill Farm House, Cornhill-on-Tweed	1946
*Little, Rev. Canon James Armstrong, M.A.; The Vicarage, Norham-on-Tweed	1946
Little, Miss Sarah; The Vicarage, Norham-on-Tweed	1947
Logan, Mrs M.; The Retreat, Blakerston, Duns	1958
Logan, Mrs E.; East Fenton, Wooler	1960
Long, A. G., M.Sc., F.R.E.S.; The Green, Gavinton, Duns	1955
Longmuir, Rev. James Boyd, B.L.; Manse of Chirnside, Duns	1946
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16.A.



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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

THE OTTERBURN STORY.

Address delivered to the Berwickshire Naturalists' Club at Berwick, 11th October, 1961, by Captain R. H. Walton.

Preface

In the summer of 1960, I was re-reading Sir John Froissart's "Chronicles of England, France and Spain," which include the well-known account of the Battle of Otterburn. Translations of this account have been quoted, paraphrased and adapted by nearly all those who have written on the subject of Otterburn and the battle.

On consideration, I came to the conclusion that the physical features of the battle-field as described in the account were incompatible with a site such as that generally ascribed to the battle on or near the "Percy Cross," three-quarters of a mile to the west of the present village of Otterburn. In the summer of 1961, in company with Mr. W. Ryle Elliot, I began a search for another site more in keeping with Froissart's description. Eventually, I was fortunate to find what I was seeking for on Fawdon Hill, about a mile to the north of the village. Here I found a battle-field with over a hundred single and mass graves.

The misconception of the true location of the battle-field has been due to a lack of faith in the accuracy of Froissart's

descriptive powers and to a pre-conceived idea that the battle was fought on a particular spot. The only supporting evidence for this idea consists of a cross-socket, called locally the "Battle Stone" and the fact that, in the past, there have been found near-by some fragments of swords, spear-heads and horse trappings.

Having got so far, this false legend was embroidered by professional writers of romance, such as Sir Walter Scott, the place embellished with an entirely artificial "cross," erroneously and gratuitously named the "Percy" cross and the whole invention with local support became immovably entrenched in the midst of the prolific works of the County historians of the last hundred years.

There have been opponents of this legend, notably the late James Ellis, who owned Otterburn Towers and East Otterburn from 1797 until 1830. This gentleman was acquainted with Sir Walter Scott and endeavoured to persuade the eminent novelist that the real site of the battle was to be found on Fawdon Hill. His efforts were fruitless and, unfortunately, he left no written memoranda of his conclusions.

The legendary site of the battle, west of the village, with its "camp" at Greenchesters, nearly half a mile from the place considered to be the scene of the fighting, presents a doubtful argument at the best of times. If Otterburn castle was, indeed, the building besieged by the Scots, what was the object of camping *west* of the Otterburn when the strongest, the impregnable side of the castle faces west? It was intended to receive the attack of the Northumbrian army whenever it might appear. Why then was the Scottish army encamped on a distant hill when it might have been lining the valley of the Otter burn to dispute the crossing with every chance of success?

Froissart said that he was told that the battle took place "entre le neuf chastel et Octebourg." Yet, how could this statement fit the site claimed? Of course, "Froissart was wrong."

Lastly, it is not claimed that *no battle* was fought at the site of the "Battle Stone," but if there was one, it was not the one which Froissart described.

None of the weapons found in the eighteenth Century near the Battle Stone remain to-day, but they might have been of an earlier or a later period and easily accounted for by the numerous local engagements which took place all over the border country for a thousand years.

The Legend

The Battle of Otterburn was fought on a fine moonlight night on or about August 19th, 1388. Those who took part were, on the one side, a small Scottish army returning from a raid into Durham and Northumberland and commanded by James Earl of Douglas and, on the other side, a much larger pursuing army of Northumbrians, commanded by Sir Henry Percy, son of the Earl of Northumberland, and Warden of the East March.

The outcome was a resounding victory for the Scots who killed or captured a quarter of the opposing army with trifling casualties on the battle-field itself, but lost their own leader, Earl Douglas, and two hundred of their three hundred knights. The Earl was killed in the battle and the knights were taken prisoner after getting lost in the course of pursuing the defeated enemy.

It can be said that the precise location of most British battle-fields of a date prior to the Civil War are now lost or relegated to the world of legend. A case in point is that of the great battle of Flodden, the exact site of which was not determined until well into the twentieth Century.

Thus it is that a cross-socket moved from its original position and once called a "Battle-stone" and some fragments of weapons and horse-trappings ploughed up in a near-by field are all that support the tradition of the accepted site of the battle of Otterburn in a field just west of the present village. The tradition does appear to be as old as the date of

Cox's "Britannia," published in 1730 and Armstrong's Map of 1770 concurs, but the earlier maps of Speed, Morden and Kitchin, though of smaller scale than that of Armstrong, mark the battle-field to the north or north-east of Otterburn, Kitchin's map of 1750 showing it to be exactly in the position occupied by Fawdon Hill.

Contemporary Accounts of the Battle

No other mediaeval battle has been so fully described by contemporary writers. Within four years of the event, Sir John Froissart, the distinguished French historian of the 14th Century wrote a long and accurate account which has been the basis of almost all that has been written in English on the battle since his day. Andrew Winton in, "The Oryginale Cronykil of Scotland be ANDROW OF Wyntoun," gives a long and clear account in rhyming couplets and in quite intelligible mediaeval English, or perhaps I should say Scots. Fordun's "Scotichronicon" gives three hundred lines of Latin in debased hexameters to the subject of the battle and, though rather obscured by poetic licence, this account is of considerable value.

Froissart himself was born at Valenciennes about 1337. In his youth, he was secretary to Philippa of Hainault, whom he may have known as a boy. He was an open admirer of the English and especially of Edward III.

Had Froissart lived to-day, he would have had no difficulty in filling the posts of gossip-column writer, sports commentator or war correspondent—possibly all simultaneously and with the greatest distinction. It need hardly be added that he was also a poet. In his time, there were other great writers, but none quite like Jehan de Froissart.

The World of Froissart

Chivalry in the middle-ages was not that which we understand as such to-day. It was not a moral way of life. It was, simply, the upper stratum of a society which existed only to

support the chivalry in the manner to which they had long become accustomed. For the Chivalry were the cavalry, the armoured knights on their war-horses who were able by means of the social system which supported them to keep in a state of subjugation twenty times their number whose only life was to supply their needs at the cost of their own.

It must be remembered that, at this time, the known world was divided, not so much into nations as into classes. Thus, all kings were brothers in theory at least. The royal dukes were cousins. The other ranks of the nobility visited and were visited in time of peace and fought together on the field of war or in the lists.

At a different level were the clergy, united under not more than two Popes and pledged to maintain the *status quo* in society as they found it. The merchants, converting the produce of the neglected estates of the nobility into cash and the means of providing the pomp of peace and the sinews of war, corresponded across the seas, their ships equipped alike for peaceful trading and naval warfare.

The yeomen managed the barons' lands and in war provided the more reliable of the infantry. At the bottom of the pile were the common people, the serfs, the "Jacks," the "pitaille," the commonalty, for ever struggling under an overwhelming burden of poverty and oppression, in time of war driven into battle to clog the feet of the enemy's chivalry and, when wounded, left to die a miserable death.

These were always ready to rise and destroy all above them whom they felt responsible for their condition but, in spite of this, they were always loyal to the king himself. To combat this peril to the Chivalry, the upper classes of all the nations of Europe were united. An example comes to light in the works of Froissart. On the occasion of the revolt of Wat Tyler against the government of the young king Richard II, Earl Douglas offered six hundred men-at-arms unconditionally to help to crush the revolt.

It was for this society that Froissart wrote his poetry, his

romances and his histories. War was the preoccupation of the upper classes of the period. They could appreciate an accurate account of a battle or siege. They had no time for generalities. They wanted to know how a battle went, who was there, who was killed, who was ransomed, by whom and for how much. Through a lucky capture of some great man by a squire or man at arms, a fortune could be made and a dynasty founded.

Froissart gave his readers what they wanted. He was received throughout Europe, knew everyone, could go everywhere. In all probability he never saw a blow struck in battle, but he was there to take down the story from those who were there and that in the fullest detail. A lively translation of his works give an accurate picture of war and the social life behind it. Over and over again, he shows a grasp of military technique which encourages the reader to rely implicitly on his judgement, not least in his account of the Battle of Otterburn and I hope to show that the battle was, indeed, as he described it.

Plans for Invasion

If you had lived on the Border at the time of the Battle of Otterburn, you would have known that the young Richard II, the eldest son of the Black Prince and Grandson of Edward III, had been on the throne of England for eleven years and that he was generally considered to be under the collective thumbs of his uncles, the Dukes of Lancaster, York and Gloucester.

You would know that the King of Scotland, Robert II, had been crowned king in 1371 after a distinguished career as Regent during the absence of David II in England after his capture at Durham in 1346. You might also have known that the king was old and tired and that the real power in Scotland lay in the hands of his eldest surviving son, Robert, Earl of Fife.

You would have experienced, during your life-time, con-

tinual warfare from both sides of the Border and you would have suffered most if you were a Northumbrian. Your parents would have told you of the great disaster at Bannockburn (if you were a Northumbrian) and the other great defeat at Neville's Cross (if you had been a Scot).

Although they had had successes, the Scots with their shaky economy (they had been unable even to feed the French army which came to help them in 1385) had suffered much more than had the English and they were always hoping for some great victory. In the spring of 1388, the situation looked more encouraging. Richard II's government was even less united than usual, the Nevilles and the Percies were at loggerheads because Henry, eldest son of the Earl of Northumberland, had replaced Earl Neville as Warden of the Marches. Altogether, the English seemed to be divided against themselves. The time was ripe for action.

With this in view, the Earl of Fife arranged a great feast at Aberdeen to be attended by all the great Lowland barons to make plans for an invasion of England.

The defence council of the North, consisting of Earl Percy, the Bishop of Durham, the Governor of Berwick and the Governor of York, were soon informed of the feast and sent to it "heralds and minstrels." This is an interesting point. Ever since the days of Homer, heralds had enjoyed a species of diplomatic immunity. Minstrels also had certain privileges which allowed them to serve, from time to time as envoys. As spies they possessed the convenient quality of being self-supporting in their travels, of being very good company and of greater than average intelligence. The reader will recall the travels of Richard I's minstrel in search of his master. As late as the Civil War, regimental bandsmen were sent to parley with the enemy, it being understood by all concerned that they would try to get what information they could in the process of negotiation. It is not surprising to read that, on these occasions, these men spent much of their time blindfolded.

On this occasion, the heralds and minstrels brought back

news that there was indeed to be an invasion and that another meeting was to be held in the middle of August by the principal Scottish commanders with their troops at the town of Jedworth. On learning this, the Council decided that their plan of action in the event of an invasion of England would be to invade Scotland in their turn. This unimaginative and sterile policy never in fact came to fruition, but it is sad to find its very parallel in this so-called age of enlightenment.

It need hardly be said that the Scottish king was not informed of his son's intentions as, in fact, he had only just concluded an understanding of peace with the English government.

The Council of War

In the first week of August 1388, the whole of the Scottish invasion army assembled at Jedworth. This force comprised no less than 1200 armoured knights and men-at-arms and 40,000 other troops including archers. Archers were the riflemen of the period and valuable men whose training had taken years to complete. Scottish archers, compared to those from Wales and England, were few and far between and the best of the Scottish infantry were armed with light weapons and, far from marching on foot, were mounted on ponies and were, for practical purposes, mounted infantry capable of moving with great speed from place to place.

The principal leaders in order of importance were : James, Earl of Douglas ; Sir Archibald Douglas ; John, Earl of Moray ; the Earl of March and Dunbar and William, Earl of Fife.

This assembly at Jedworth was followed, on August 8th, by a formal council of war at the tiny village of Southdean, in the middle of Jed Forest, only a few miles from the Border. The meeting was to be held in the village church, probably the only habitable building in the place.

To this council was sent a spy. An intrepid squire set off from Newcastle on horseback, dressed as any other borderer. In due course, he arrived at Southdean, tethered his horse to

a tree and boldly entered the church posing as the servant of some great man. Inside, he learnt the Scottish plans and left the church again to hurry back to Newcastle.

Outside, he was appalled to find that his horse had been stolen. At this point, Froissart remarks, rather bitterly, "for the Scots are great thieves." Be that as it may, there was nothing for it but to walk home and so the squire set off, booted and spurred, through the village. Unfortunately, he happened to pass two Scotsmen. One of them, catching sight of him, said to the other (according to Froissart), "There is one thing that I have never seen before, a horseman who has had his horse stolen and who is making no complaint about it. If I am not mistaken, he is not one of us. Let us follow him and see if I am right."

This they did and when he failed to tell a convincing story he was taken before the commander in chief, Earl Douglas, who soon broke down his resistance and made him tell all that he knew of the English plans. After that, in a spirit of great generosity, his life was spared and he was committed to the doubtful care of the governor of Jedworth castle to be incarcerated "for the duration of hostilities."

After the arrest of the spy, it was clear to the Scots that any further delay was undesirable and the council of war re-assembled. It was decided to divide the army into two parts in order to confuse the enemy. The larger division, composed of 900 knights and 38,000 infantry was to go to Carlisle to ravage Cumberland while the smaller part consisting of 300 knights and 2,000 infantry mounted on ponies, all picked men, was to make for Newcastle and from there invade Durham. If either force was attacked, the other was to come to its assistance. (Looking back, it is hard to see how this part of the plan was to be effected.)

The commander of the Carlisle expedition was Sir Archibald Douglas, with twenty-two subordinate leaders. The fortunes of this venture do not concern us, but nothing was achieved in Cumberland. The Newcastle division was commanded by James, Earl of Douglas with a number of knights of great

renown. It is their fortunes which we shall follow in this account of the Battle of Otterburn.

So the two armies separated, the Carlisle division travelling perhaps by the Wheel Causey and the Maiden Way and the Newcastle force through winding by-ways to the Tyne valley.

The Chevauchée

The expedition started, therefore, with the advertised intention of making for Newcastle. It would seem obvious that this particular force was quite incapable of conducting any but the most trivial siege operations and that it would have to depend for its success on its extreme mobility. Whatever the existing plan, the commander decided to make for the County of Durham, crossing by one of the fords between Hexham and Newcastle, probably at Wylam as this lay above the limit of tidal water.

As it was intended to travel by by-roads without attacking any place and so raise the alarm, it may be interesting to see what routes the Scots might have chosen. Starting from Jedworth, there were three possible ways over the Border. One by the Reidswire and from there to Byrness, where a drove road went to Woodburn and on by Dere Street; a second choice was to go by Dere Street and cross the Rede at Byrness: a third might be to travel on Dere Street as far as the inner Golden Pot near Cottonshope and then take the Drove-road across the "Broken Moss" to Elsdon and from there go by paths across the centre of South Northumberland passing from village to village by connecting lanes.

As it was summer, there would be little difficulty travelling over defective roads, but there was one obstacle to mounted men.

It is quite possible that the Wall was sufficiently intact at this time to necessitate choosing one or other of the gate-ways by which to pass it and on this occasion it is likely that the Port-gate was used or the gate under the wall at Hunnum.

Whichever route was chosen, the Tyne was crossed on

August 10th, probably at Wylam, without any news having reached the enemy.

Northumberland on the Alert

The whole responsibility for the defence of the North lay on the shoulders of the Earl of Northumberland, Henry Percy, as senior member of the Council of the North.

On this occasion, he was fully aware of the situation but he was unable to find out, after the loss of his spy, the time and place of the invasion which he knew was being planned.

The usual route for such an invasion lay across the Tweed between Kelso and Berwick and this line had to be held at all costs.

To cover himself, he sent his two sons, the popular and redoubtable Henry "Hotspur" and his equally famous brother Ralph, to Newcastle to take command of the troops there. As there was no such thing as a regular army at that date, these troops under their several local leaders consisted of townsmen and those countrymen who were ready to flock to the town in the event of an alarm.

The Earl himself remained at his headquarters at Alnwick awaiting the outcome of events over which he could have little control. With Newcastle packed with men, the alarm came as no surprise when, on the morning of August 11th smoke was seen to rise from burning farms and crops on the Durham side of the Tyne around Dunstan and Whickham. Those who had not already done so moved inside the walls of the town, everyone stood to and word was sent to Alnwick that the invasion had begun.

Fire and Sword in Durham

Meanwhile, the Scottish army moved south across the low hills of Durham, burning houses, killing all who stood in their way and rounding up the cattle which was to be the concrete evidence of their success when they returned to Scotland. On reaching the walls of Durham, they hurled insults at the

townsmen and, failing to breach the defences, turned northward towards Newcastle once more burning all but the best fortified villages on their way.

As it was impossible to use the bridge at Newcastle, they had to cross again at Wylam and from there they passed through country deserted by the inhabitants until they came, at last, to the walls of Newcastle. Around these, for the next three days, they moved freely under the watchful eyes of the garrison.

At the Barriers

It says little for the state of morale in the city that, throughout the time that the Scots were, for all practical purposes, investing the place, nothing in the way of a sortie was attempted. It would appear that even so small a force as that of the Scots commanded respect, if it was not actually feared.

The Northumbrians were not entirely without spirit. Froissart records that, "there was continual skirmishing at the Barriers and the Percy brothers were always at the front." These "Barriers" were a common feature of mediaeval walled towns. They consisted of heavy wooden post-and-rail fences erected outside one or all of the main gates. They were placed there to prevent the gates being rushed during the day in a surprise attack in times of peace and probably served as a form of customs check for farm produce entering the town. In time of siege, the Barriers came into their own for a special kind of combat.

A knight from one side or another would advance to the barrier on foot. He would then challenge anyone from the opposition to spar with him across the fence. Whatever happened, neither party could be captured and held to ransom, although either could, of course, be killed or wounded. Thus they were able to enjoy all the fun of a real battle without the expense.

In the case of the city of Newcastle, the Barriers were, almost certainly, located at the cross-roads where Blackett Street and Newgate Street cross a few yards in front of the

"Berwick Gate," later rebuilt as the "New Gate." The Barriers were known, as late as the 17th Century, as the "Maudlin Barres beside the Great Crosse or White Cross." The Berwick Gate led onto the road to Berwick, whilst up "Gallowgate" to the west ran the road to the gallows on the moor near Fenham Barracks. Barras Bridge was on the Berwick road where it crossed the Pandon Burn.

It was in the course of one of these contests watched, no doubt, with the keenest enjoyment by besieged and besiegers alike, that Earl Douglas severed the head of Hotspur's lance and carried away the pennon affixed thereto. This he set to fly over his tent in sight of the walls, promising to carry it home to set over his castle at Dalkeith if Hotspur was unable to win it back. This was, perhaps, a somewhat simple if not actually unsporting ruse designed to tempt the Northumbrians to make a sortie, which Douglas may well have hoped to defeat with great loss in view of the fit and well-trained state of his own troops, which training was to show to such advantage in the subsequent encounter at Otterburn.

At the end of the day, the third of the siege, the Scots retired as usual to feast on the ample rations which they were driving with them, set double sentries to guard against a sortie during the night and conferred on the advisability of setting out for home while their good fortune lasted. It was, indeed, more than likely that the Earl of Northumberland would decide to move south from Alnwick to intercept them and they were already outnumbered four to one by the men of Newcastle.

Against the wishes, apparently, of Sir Henry Percy, no night attack materialized and, soon after midnight, the Scottish army folded its tents and stole silently away.

The Road Home

At this time, there was of course no direct road from Newcastle to Jedworth. The "New Line," as it is still called, was not made until the end of the 18th Century. The Scottish

army travelled either by way of Ponteland, Belsay and Middleton to meet the Morpeth-Elsdon road at Gallowshill or turned north at Ponteland to go by Whalton, Meldon and Dyke Nook. From Elsdon, they would take the drove-road over the "Broken Moss" to meet Dere Street at the inner Golden Pot.

At four o'clock in the morning, in a classic dawn attack and against little opposition, the Scots stormed into the little "castle" at Ponteland which stood just to the north of the church. This was, most probably, a fortified house or bastle and was owned by a former sheriff of Northumberland, Sir Aymer de Atholl, the brother of the Earl of that name. It happened that Sir Aymer was there at the time, no doubt endeavouring to safeguard his property and he was taken prisoner to be, perhaps, the only independent eye-witness of the forthcoming battle.

Now, the further movements of the Scottish army are open to some speculation. Free translations of Froissart's account have assumed they rode on to Otterburn Castle in the village of that name and where the present Otterburn Towers stand. What Froissart actually said was that after the Ponteland affair, they "came to the town and castle of *Combure* and there camped." Nothing is said at this time or until much later of Otterburn, and there is no reason on philological grounds to think that Froissart meant Otterburn when he wrote "*Combure*." His informants were two Scottish knights who were at the battle and two Gascon knights or men-at-arms, probably from the Free Companies and come to England in the train of some English lord. These fought on the English side and were captured. Their knowledge of both French and English would have been of great assistance to Froissart in the course of his cross-examination of all four witnesses of the battle. In his Chronicles, I have noticed that he tends to write down names in phonetical spelling, whilst he translates into French the names of places. Thus "*Combure*" is probably "Camp burg," or "Camp Hill"

describing Fawdon Hill as it was called then (The adjacent Colwell Hill with its camp was called "Camp Hill" in 1860). As to the present Otterburn Towers, there is no record of a castle there until 1415, although there could have been one before the date of the list in which one is recorded, if it were not for the fact that Sir Gilbert de Umfraville, who died in 1305 owned, besides his castle at Prudhoe, the *Castle* of Harbottle and the *Manor* of Otterburn. Had there been a castle there, it would have been mentioned in his Will.

This Will does include, in the Manor, "Hirnhouse," or Ironhouse as being in existence and this, in ruins, can be seen today and is a perfect example of a Bastle—house of great size and strength. The foundation and lower courses of the walls are of solid stone built up in huge blocks as a deterrent to mining in a siege.

If, then, "Hirnhouse" existed before 1388, then there was, certainly, a similar house to this in the Manor of Otterburn and on the Otter. In fact, just such a bastle-house does exist, in ruins and of the same form and strength as Hirnhouse and in its prime well able to withstand a siege. This is Old Girsonfield farm house which is at the foot of Fawdon hill and stands in marshy ground. Froissart, in describing the "Bourg," or castle of Combure says that it "Sits in a marsh." This description has always been held to be a false one, because it has always been applied to the site of the later tower at Otterburn Towers, which is manifestly *not* in a marsh. These bastle-houses were, indeed, very tough nuts to crack, being of at least three stories and almost windowless, the defence being carried on from a parapet walk. It is not surprising that the Scots, having assaulted the place during the day following their arrival at "Combure," accomplished nothing after tiring themselves out by the end of the day.

Leaving the damp ground around the bastle-house, the Scots fortified the British camp on Fawdon hill above, the knights having their tents pitched within the camp and the troops making shelters of boughs from near-by trees in the

way that soldiers have always done. Everyone settled down for the night, hoping to be up early to renew the assault the next morning. The cattle which they were driving with them were herded into a long marsh below the hill to the south and the servants and baggage were placed on the east side of the position, as Froissart says, "On the Newcastle road."

A council of war was held and the general opinion that the army should march away to Carlisle the next day was overruled by Douglas who insisted on staying, either to take the castle or to meet a Northumbrian attack whenever it might come. We leave them now, towards dusk, sitting round their camp fires or preparing to sleep, while we consider the nature of the ground on which a battle was to be fought in a few hours.

Pre-view of the Battle-field

Before reading a description of a battle, it is sometimes helpful to be able to picture the ground over which the battle was fought as it was at the time of the battle. Here at Fawdon Hill, the ground is untouched by modern development or agriculture. Apart from the absence of an extensive wood to the north of the battle-field, the ground presents much the same appearance to-day as it did in 1388.

The actual battle was fought over a small area, perhaps no more than four hundred yards square, the combatants being hemmed in on either side by, to the north, the earth and stone dike forming the wall of the Deer-park within which the battle-field lies and to the south, a long narrow marsh in a shallow valley.

The circular British camp lies at the west end of the field, divided in two by the park wall, and occupying the highest part of the hill. From the camp, the ground slopes rather steeply south towards the marsh and runs almost on the level for a hundred yards or so to the east and then dips slightly again. To the north of the Deer-park wall, there was, at the time of the battle, a continuous wood extending

across the moor as far as the Drove-road and virtually impassible. To the west, the hill slopes steeply down to the Manor fields and Girsonfield, the ground of which was being cultivated at the time of the battle and so was unwooded.

The only approach to the Scots' position was along the hill-top from the east and Elsdon or up-hill from the general direction of Girsonfield and the mouth of the Otter, where the present village lies.

In addition to the Deer-park wall, there are three contemporary earth or earth and stone dikes. That they are contemporary is proved by the fact that the "graves" consist of piles of stones covering the bodies without any real burial and these have been taken from the park wall dike and the other earth dikes where they are close to a burial. Elsewhere, the dikes are intact.

The position of the graves and other features on the ground show quite clearly the course of the battle and that Froissart's account is completely credible as far as any account of a battle can be.

Attack at Dusk

At Newcastle, Sir Henry Percy had been unable, at first, to persuade his command to take up the pursuit, although it was known that the Scottish army had gone. The opinion generally was that the main Scottish army was still to come and caution prevailed, much to the annoyance of Hotspur whose pride and prestige had suffered a set-back on the previous day.

Such was the delay that it was not until the day after the departure of the Scots that an army was assembled, comprising no less than six hundred knights and eight thousand others. Scouts came back from the vicinity of Otterburn to report in detail the dispositions and recent actions of the opposing army.

The situation was now reasonably clear and it seemed certain that there was no possibility of another Scots army

arriving to join that of Earl Douglas. The Northumbrian force was so superior numerically that hopes must have run high that this time victory would be within their grasp. As an additional security, it was known that another army was expected hourly under the command of Bishop Skirlaw, Bishop of Durham and military governor of the Bishopruck.

The army started its march late in the day, about 2 p.m., having delayed its start so that the mid-day meal might be eaten.

The Northumbrian army marched at the pace of the slowest, the bulk of the infantry being on foot, unlike the mounted infantry of the Scots, so that it was nearly dark when the enemy's position came into view. It is interesting to consider what might have been the outcome if Hotspur had halted his army for the night, perhaps on Colwell Hill, half a mile to the east of the Scots' position, camped there and made his attack at dawn. It appears that he was afraid that the Scots might slip away in the dark, because he had made special plans to prevent this, as we shall see.

At all events, apparently without the least sort of reconnaissance, the army, pausing only long enough for the knights to dismount and join the infantry, marched straight towards the enemy position and attacked, as they were meant to do, the servants' quarters, the baggage and the horse lines. And so the battle began which was to plunge half of Northumberland into mourning.

The Battle

The tactics of the battle, such as they were, consisted of a two pronged attack on the Scots position by the Northumbrians, the main body making a frontal attack and a smaller party under the command of Robert de Umfraville passing round the flank of the main battle to attack the tents of the knights and to cut off the Scots retreat if they should fly. Earl Douglas, uncertain until the time of the battle of the enemy's intentions, but knowing that his position was vul-

nerable only from the east, placed there the baggage and servants, the latter including, of course, any civilian camp followers who might have attached themselves to his train. Froissart refers to those with the baggage as "varletz" which term earlier he has used in the sense of fighting men, but that they were civilians is confirmed by Winton who calls them "folk." Having secured his front, Douglas then arranged for this to be reinforced in the event of an attack by all the fighting men who could be found in a state of readiness, whilst, as soon as possible he himself was to lead a strong party of knights along the southern slope of the hill behind some small trees and make a determined attack on the unprepared left flank of the enemy as it moved forward along the hill-top.

At such a great distance of time, it is hard to say at what precise time of night the attack came, but that it was at dusk is almost certain, because Winton records that a Scottish horseman came galloping into the camp shouting that the English were coming "Owte-oure a Brae down awaland" which expression can only mean that they had come over the top of Colwell hill and were moving down the hill in sight of the Scottish position. This also means that it was not yet fully dark and we know from the account that the Moon rose later in the night after the battle had been going on for some time.

Due to the natural obstacles on either side of the field, consisting respectively of a stone dike and a length of marsh, the battle front was a small one and the full strength of the large Northumbrian army if they were, in fact, all there at the same time, could not be deployed to advantage. The Northumbrian "battle" consisted, therefore, of a dense column of men led by the Percies, advancing as fast as they could push and stumble through the mass of baggage, spare horses and the servants who, armed with their masters' spare weapons, seem to have put up a remarkably good fight against the virtually invulnerable armoured knights opposing them.

So the battle started. It must be remembered that this was no set-piece "national" battle directed by kings, accompanied by their full governments, complete with ranks of professional archers, mercenaries and waiting ranks of men at arms. This was a local affair involving the Borderers of two adjacent countries, a furious mêlée of men on foot, armed with shortened spears, swords and hand axes. Once the two sides met in full battle, it was to form an immense rugger scrum in which only the front ranks could strike blows whilst those behind kept up an enormous pressure at their backs, the whole affair taking place in gathering darkness to the accompaniment of reiterated rallying-cries and the clash of steel on steel. It is impossible to conceive to-day, the noise of a mediaeval battle although Froissart once described one such "as if all the armourers of Paris were plying their trade on the spot."

As to dress and appearance the two sides were, distinguishable only by the fact that the foot-soldiers on the Scottish side were armed for the most part in the simple chain armour of the period, whilst the Northumbrians were clothed in leather—the "cuir bouilli" or hardened leather which served very well to turn the edge of all but the sharpest weapons. Although the Scots did, indeed carry and use a small species of hand axe, the Jedworth Axe of fame and legend is now considered by the best authorities to be, alas, only a legend.

The knights on the English side were, of course, fully armed and armoured, but the knights on the Scottish side were, in many cases, forced to enter the battle with what parts of their armour they could don in the short time available. There is no doubt that Earl Douglas was, virtually, fighting in his ordinary clothes, having had no time to look to his own needs while he directed his men to meet the English attack. The Earl of Dunbar, also, fought throughout the battle bare-headed, but as he was one of the principal leaders and director of the battle on the northern side of the battle-field, it is more than likely that he was mounted throughout the battle and so, relatively, out of harm's way.

Once the Northumbrian van had fought their way clear of the baggage and the servants and were preparing to pursue the survivors, they were met by the main strength of the Scottish foot arriving albeit piecemeal, but in ever increasing numbers. Although wearied by their long march and the press of the battle and unable to deploy their superior numbers, the Northumbrians appear to have reached the western extremity of the battle-field as we see it to-day in their first advance, there to be halted by the sheer killing power of the fresh and battle-trained Scottish foot and by the surprise arrival on the flank of Earl Douglas' body of knights charging up-hill out of the gathering darkness. This attack, delivered possibly a little late, caused the left wing of the Northumbrian van to turn away down-hill to meet it and so open and weaken the centre. It was in the centre and on the right that the Northumbrian advance received its first check, which was to turn into a reverse. The northern side of the battle-field slopes towards the east and here the advantage must have been with the Scots and here, it is recorded, the Earl of Dunbar had great success.

This flank movement of the Douglas was, possibly, the crucial manoeuvre of the battle for the reasons stated, but the risks involved were very great and the attack came within an ace of failure. At first, it was met by overwhelming pressure from the superior numbers of Northumbrians pushing down-hill. To relieve this pressure, Earl Douglas, who was a man of immense size and cast in an heroic mould, sprang forward amongst the spears of the very front rank of the enemy swinging his hand-axe, probably in an endeavour to fell as many as possible before he himself was wounded or killed, with the object of causing the enemy's front rank to collapse and so halt the advance. In view of the fact that he was unencumbered by armour, it is just possible that this action, calling for speed, strength and dexterity might have succeeded but, as might have been expected, he was an easy target for three spears which pierced him simultaneously and against which he had no armour to protect himself. He fell

at once, mortally wounded, and the enemy phalanx rolled on over his body unaware of his identity.

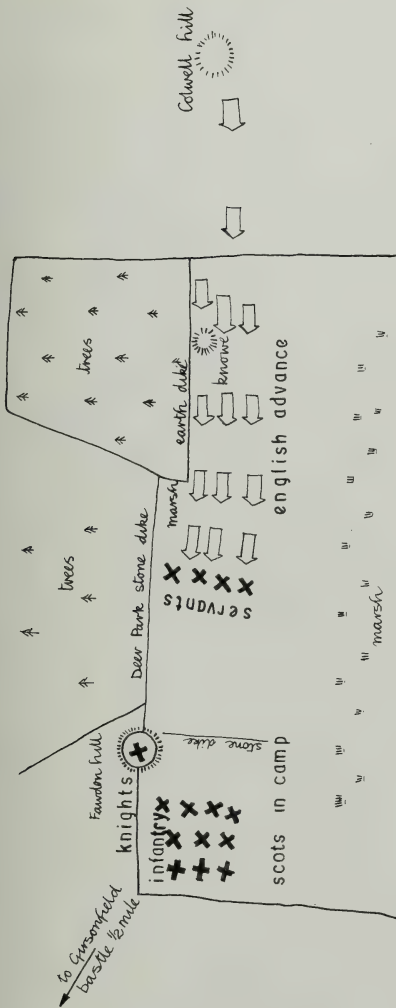
Had he been recognized, it might have been the end of the Scottish hopes for the night, for the word of his death, once spread, would have caused panic in the ranks of his men. Such was the effect of a system of fighting in which a body of men might follow a leader to the death but, should he be killed or wounded and his battle-cry cease, all might fly though the battle might still be won if all remained on the field. So it was with the Northumbrians as we shall see.

Fortunately for the Scots and possibly due to the reversal in the Northumbrian centre or a re-inforcement of the flank attack, the latter began to gain ground up-hill until it had, in fact, reached the spot where the Douglas lay, dying but still conscious. Here they raised his standard by the body of his standard bearer and began again to shout as loudly as possible the rallying cry of "Douglas, Douglas."

The Northumbrian centre, both Percy brothers as usual in the lead, met with ill fortune. Sir Henry, engaged with superior strength, was fought to a stand-still by Lord Montgomery and had to surrender. Sir Ralph was badly wounded and was forced to give himself up to Sir John Maxwell who in turn delivered him to the Earl of Moray whom he was serving at the time.

From this time onwards, it appears that, when the flank attack had fought its way back to the top of the hill, where the very spot can be seen to-day, it was joined by the successful Scots who had driven back the Northumbrian centre whilst, on the Scottish left near the Deer park wall, the Earl of Dunbar had gained complete mastery over the enemy who were beginning to retreat. These two positions now dominated the battle-field and it must have been soon after this that the flight of the Northumbrians began in earnest. With the rallying cry of the Percies long silent, there was virtually no leadership left.

It was every man for himself and already many had antici-

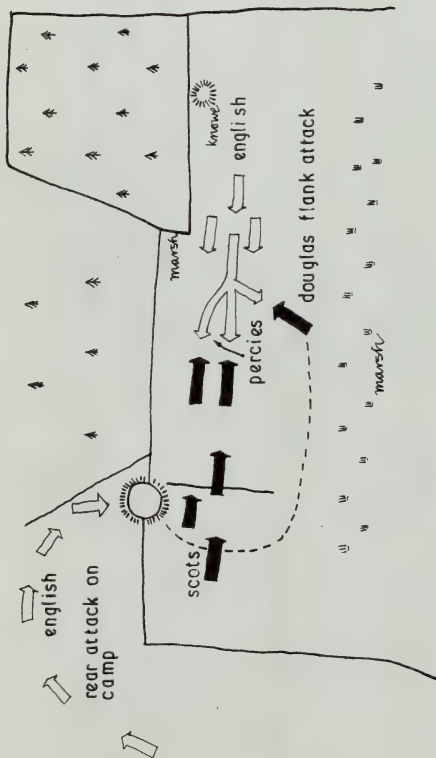


BATTLE OF OTTERBURN PHASE I

august 19th 1388 9.0 p.m.

scots : 300 knights
200 foot

english : 600 knights
8000 infantry



BATTLE OF OTTERBURN PHASE II

august 19th 1388 10:0 p.m.

scots : 300 Knights
2000 Foot

english : 600 Knights
8000 Infantry

FAWDON HILL.

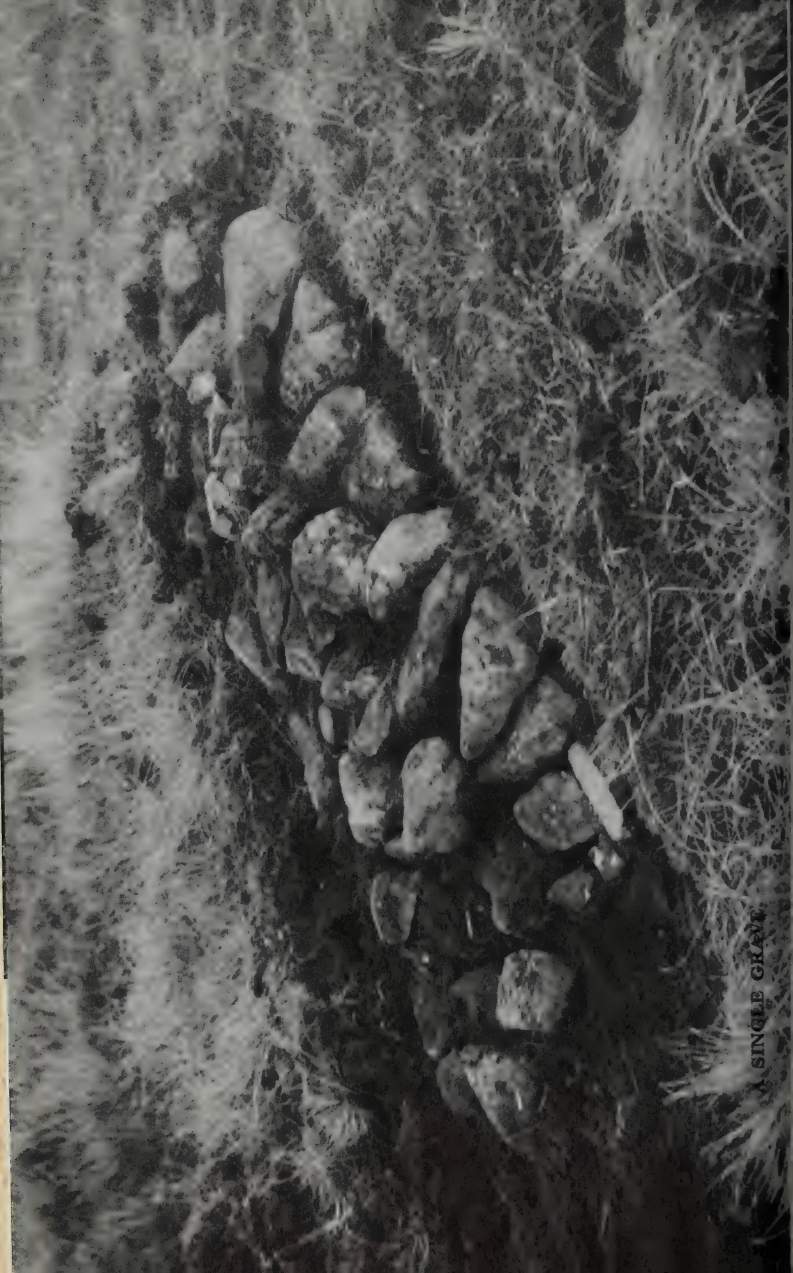


THE BATTLE

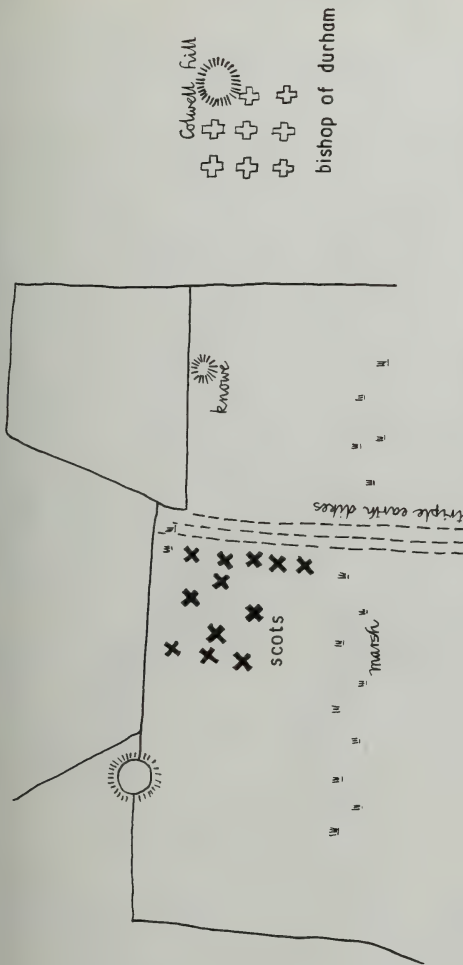
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RM THE SOUTH.



A SINGLE GRANT

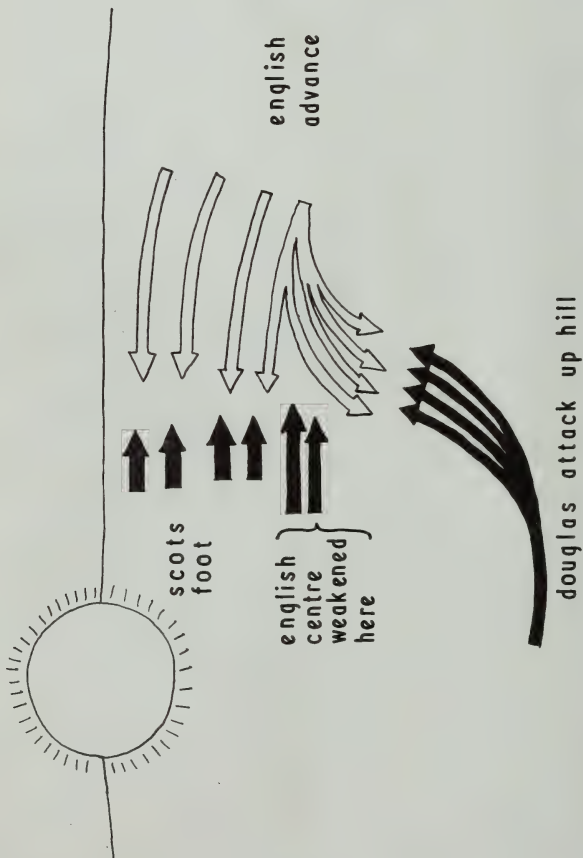


BATTLE OF OTTERBURN PHASE IV

august 20th 1388 4 0 p.m.

scots : 100 knights
1800 Foot.

english : 10,000 in all



TACTICAL EFFECT OF DOUGLAS ATTACK

pated defeat and had gone to seek their horses or those of others who would need them no more.

The Pursuit

Now came the moment of truth. This was what all on the Scottish side had been waiting for. The fever of killing gave place to the fever of gain. Plunder and ransom was in every mind. Bearded knights, faces grey with dust and sweat, armour splashed with blood, howled for their chargers. In the gaps between piles of dead and wounded, squires and servants hoisted their masters onto the great war-horses and sent them away at a gallop and in all haste so that they themselves could join the mass of soldiery searching through the fallen for some easy prize or, at least, a suit of wearable armour.

For the knights, this was the great moment, the pay-off, when the years of experience behind them would bear fruit and their debts, if they were lucky, would be paid off at last. The knightly class, the Chivalry, had long since discovered the delightful fact that sport could, indeed, be profitable. Admittedly, the battle-field itself was a brutal, costly affair when the most skilful rider in the lists might fall at the feet of some common spearman but, in the pursuit, knight met knight and deeds were done which gave pleasure to both and wealth at least to one. Nor need friendships be impaired. It was all part of the game. All were akin in the brotherhood of Chivalry and what was lost to-day might be regained to-morrow and, in the meantime, the tenants' rent could be raised.

So, away across country in the dark went pursued and pursuers. Some rode their quarry down within a mile, some were less fortunate. Sir James Lindsay had to ride nine long miles before he was able to overtake Sir Matthew Redman, the elderly but active Governor of Berwick. The chase began on the battle-field itself, the gallant Sir James calling upon his quarry to turn and fight like a man. Sir Matthew, for his part, preferred to trust to his horse's speed and it was not

until it fell that he was forced to draw his sword and fight. After a long interchange of blows with advantage to neither, the weight of age told on the hardy governor and, thoroughly exhausted, he gave himself up to the mercy of his younger adversary, whilst the warriors' horses browsed peacefully nearby. Terms of ransom having been arranged to the satisfaction of both parties, Sir Matthew agreeing to appear in Edinburgh in three weeks time, the two parted on the very best of terms, Sir Matthew riding on towards Newcastle, Sir James in search of his own companions now spread across half Northumberland, which, unfortunately, was to be the undoing of the latter.

Whatever their fortunes in the chase, few of the Scottish knights appear to have been at home in their surroundings and no less than two hundred of them became lost and were forced to surrender. Sir James had the remarkable but humiliating experience of being captured by the Bishop of Durham himself and in person, having wandered into the middle of the Bishop's army marching towards the battlefield. Nor was that the end of his ill-fortune, for orders were out from the English Government that Sir James was "Wanted" and that on no account was he to be ransomed if captured. An unhappy ending to an otherwise enjoyable night.

What of the party which was sent out to capture the tents and prevent the enemy's escape? It appears that this arrived at the round camp in which the Scottish knights were lodged just after the battle had begun and when the camp was empty. It is most likely that Umfraville led his men directly from Elsdon to the present site of Otterburn village and climbed the western slope of Fawdon Hill unseen by friend or foe. Guards were left to secure the prize—probably against the depredations of other Northumbrians in the expected event of victory. The knights and others joined the battle and were, in most cases killed or captured. After all was over, the Scots heard noises in the camp and went over to investigate.

It seems more than likely that the guards were by that time drunk. At any rate they were making a great noise and also making themselves at home to some purpose. The Scots according to Winton, "Thare fand thai Inglis men hamly duelland, as all thare awne ware," and then "schot thai stoutly on thame thare and slwe welle nere all that thai fand." The only recorded occasion in this battle when archers went into action. The graves of the slain can be found to-day where these men fell.

Bishop to the Rescue

The Bishop of Durham, whilst the Scots were engaged around Newcastle, had collected a force to assist the Northumbrians and, as the county of Durham was not in the same state of readiness as its northern neighbour, this took time. It was not until the fourth day after the Scots left Durham that the Bishop's army arrived at Newcastle. Learning that Sir Henry Percy had already left the city in pursuit of the Scots and, as it was now dusk, the Bishop had a hasty dinner and assembled his army of two thousand mounted men and five thousand others and set out on the road to Otterburn.

According to Froissart, the van-guard had not reached Ponteland before the first of the fugitives from the battle burst upon them crying that the Scots were on their heels and all was lost. Clearly, this was an exaggeration and it is my opinion that these men were not in the battle and that, either they had never reached the field or if they had they had anticipated the result and made off in good time. Whatever the truth of this conjecture, the result of the encounter was that nine-tenths of the Bishop's army departed into the night, leaving him with a much depleted force the leaders of which could do no more than advise him to return to the safety of the walls of Newcastle. This he did, but not before he had waited on the spot for some time and acted the principal part in the famous capture of Sir James Lindsay.

This incident brings doubts to one's mind as to the pro-

bability of its location so close to Newcastle as Ponteland. Froissart says two "leagues," usually reckoned as about six miles.

The one weakness of Froissart's account lies in his indiscriminate reference to "Leagues," "Scottish Leagues," "short leagues," etc. The League was of different values in all the countries of Europe, being of Gaulish origin, whilst in England as late as the end of the eighteenth Century the actual length of the "mile" shown on sign posts—when it *was* shown—varied by up to one third from the length of the "statute" mile.

It would be fair, therefore, to place this incident much further west. One clue does exist in the form of an unfinished mediaeval earth-work now on the edge of Harwood Forest and a short distance from Harwood Head by the side of the old main road to Elsdon.

Tradition associates this work with the Bishop of Durham at the time of the Battle of Otterburn. The best that we can do is to strike a compromise and compromises are rarely successful.

Final Skirmishes

The battle seems to have lasted until dawn, although the main battle-field must have been cleared at a much earlier hour. The full moon had lighted the battle almost throughout and the countryside would be thronged with fugitives on foot and their mounted pursuers. The Earl of Dunbar, who had taken command after the death of Douglas, sent out patrols towards Newcastle to secure his front and the remainder probably spent the rest of the night enjoying the fruits of victory, whilst the prisoners slept the sleep of utter exhaustion.

At Newcastle the Bishop, after a few hours' sleep, had risen and succeeded in recruiting an army of ten thousand men willing to renew the struggle with the Scots. The whole county was now in a state of alarm as the news of the defeat flew from village to village and the Bishop's expedition must

have been regarded with little enthusiasm. Certainly, he must deserve a great deal of credit for his organizing ability and powers of persuasion under these difficult circumstances.

The expedition left by the Berwick Gate at dawn on August 21st, scouts galloping on ahead to search the countryside for signs of the enemy, whilst the enemy scouts in their turn relayed the news of yet another Northumbrian army approaching.

At Fawdon Hill the Scots had been busy all day after the battle. The prisoners had been sorted out and the matter of ransoms arranged. Sir Ralph Percy had been liberated so that his life could be saved by the primitive doctoring of the period, with strict instructions to report at Edinburgh as soon as his wounds were healed. Sir Henry was still a prisoner, as his ransom was an exceptionally heavy one. Due to his general popularity in the whole country, and on account of the fact that he was the principal commander of the Northumbrians in the field he was, later, granted at least two thousand pounds towards the ransom, half by the Crown and half by some sort of grant voted by the people of the various counties.

As to prisoners "of the lesser sort," these were treated with exceptional generosity. Those who could pay something on the spot did so and were released, others promised to pay later and many were, in any case, destitute (a not uncommon state in Northumberland at that time). So the Scots were relieved from the encumbrance of their prisoners in any coming battle, but not before some major works were accomplished with their assistance.

First, the dead were heaped up to form additional ramparts so that the only entrance from the east was a narrow one. Then, it is almost certain that the triple earth-banks which can be seen to-day were raised. These remarkable structures run for over six hundred yards across the eastern side of the battle-field. They are made from sods and are not just piles of earth. Not less than eighteen hundred yards of this banking must have been raised in a day. With the manpower

available and dire necessity driving them on, the work, at one yard per man was not an impossibility. And it was a necessity. The Scots had lost two-thirds of their armour and were in no state to meet, in daylight, a force much superior to their own in the matter of armoured knights. These linear earth-works constituted the recognized defence against the knight, the object being to make the knight either dismount or, if he attempted to ride his ponderous steed over the bank, run the risk of having his horse killed under him.

It is clear that, by now, the Scots had had their fill of battle. At any rate, they now made use of a manoeuvre which could hardly be expected to succeed against fresh troops untouched by adversity. It seems that every knight and possibly many of the others carried, as a matter of course, a hunting horn capable of making a very considerable amount of noise.

When the Bishop's army reached Elsdon, the horns began to sound and the resulting cacophony is said to have produced a weird effect. It was not, however, the means of arresting the Bishop's progress, the intrepid cleric leading his army to the top of Colwell Hill from which elevated position he could view the whole of the Scottish camp. He marvelled at the strength of the position and how much stronger it was now than it must have been when the Percies had been able to march straight in at the time of the first battle.

By this time at such close range, two bow-shots as Froissart says or nearly half a mile, the noise of the horns must have been appalling and the Bishop gazed at the ground below, packed with men and horses and alight with pennons and ordered his men to retire. No-one cared to disobey. There was to be no second battle of Otterburn.

The Scots re-cross the Border

It was now clear to the Earl of Dunbar that they had no more to fear from the English. They themselves had been victorious beyond denial. They had valuable booty and still

more valuable prisoners. Froissart credits them with acquiring a total ransom of 200,000 crowns for their trouble—say £150,000 in to-day's money. Admittedly, two hundred of their own knights were captured through bad luck and their great leader, James Earl of Douglas was no more, with his companion Sir Simon Glendenning.

For one day following the skirmish with the Bishop, they worked at the unpleasant task of covering the dead with a little earth and a great number of loose stones which they dragged from the Park wall and from the other earth dikes. It is a wonderful thing that they did this. It was hot weather and if the work had been left, as it usually was on these occasions to the local people, it could never have been done at all. As it was, all the bodies were given protection from dogs and foxes and the mere shadows of these bodies, outlined only by the rust of their chain mail, can be seen under the stones to-day.

It is possible that some special memorial stone was placed at the battle-field at a later date, but none has yet been found. There is a well-known fragment of the head of a cross which was found in the wall of Girsonfield farm yard many years ago. This can be seen in the porch of Otterburn Church. When I examined it for the first time, I was surprised to see that no one seemed to have noticed that this cross is a saltire cross. Whether it has come from some church roof or from the battle-field, it cannot be denied that it is, in all probability, of Scottish origin.

As they marched away, the Scots burnt their huts and to-day nothing but the dead remain to tell us that here on Fawdon Hill there was once a great battle. They spent the first night near the border, possibly at Chew Green and, carrying the bodies of Earl Douglas and Sir Simon Glendenning, on the next day they reached Melrose where their hero was buried. At Melrose, no doubt, the cattle were sold and the monks banked the money from the sale and from the ransom money and helped to record the transactions. It had been a famous victory.

Causes of Defeat

On looking back, it is hard to see why the Northumbrians did lose the battle. They had numerical superiority of nearly four to one. They had the best reputation as fighting men. They were fighting on their own ground. Yet they lost.

Several reasons may be put forward. First, a night battle is always a chancy affair. Secondly, the infantry had just marched twenty-four miles and these same men had been shut up in Newcastle for the preceding week without exercise. Thirdly, it is questionable whether the men assembled in Newcastle were the best or, rather, the most suitable that the county could produce.

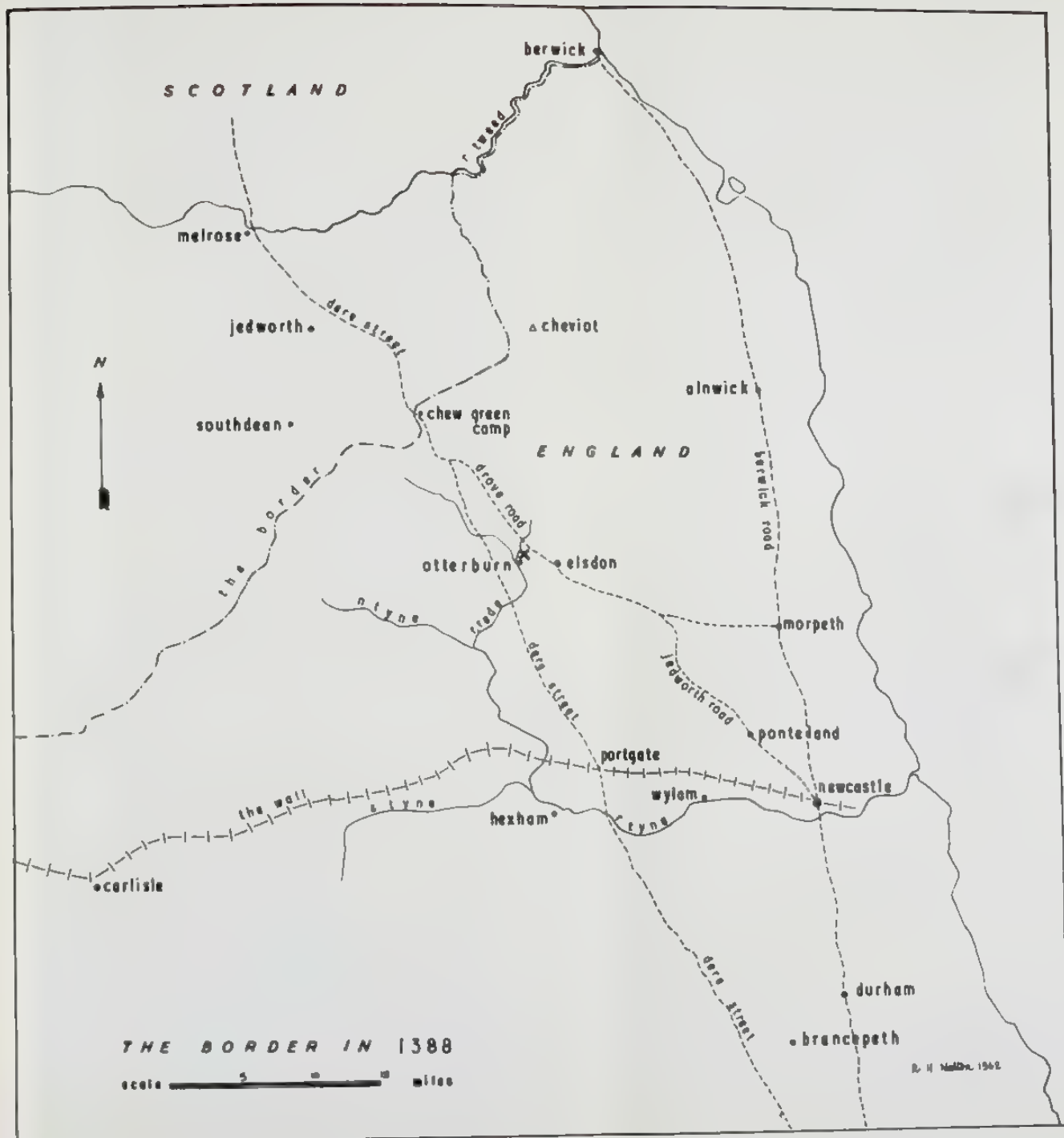
At this time a local squire might appear on the field of battle with a dozen of his own people who would follow his particular battle cry. If he was killed and his men dispersed as a result it was not of much harm to the army as a whole. If one leader commanded a great number of men, his death or wounding might mean the loss to the army of the whole of his command.

At Otterburn there must have been a large group of townsmen who were following one leader possibly one of the Percies, whom they did not know and whom they would desert if he was put out of action. On a dark night the necessity for a rallying cry was even more marked than in day-light.

On the whole, I think that what had happened was this. Earl Percy himself had remained, quite rightly, at his command post at Alnwick, believing, reasonably enough, that the main invasion across the Tweed was still to come. Is it not likely that he would keep with him the cream of the fighting men of the County, hoping that the leadership of his famous and experienced sons would inspire the remainder ?

Froissart mentions comparatively few Northumbrian names of note at the battle. Where were the others ? I think that they were somewhere between the Tweed and Alnwick waiting, like good soldiers, for the invasion which never came. These, with their experience and supported by their retainers, might





have won the battle but, had there been in fact a second invasion from across the Tweed, the Earl of Northumberland might have lost his county and with his county, his head.

Conclusion

The battle was over at last. Neither country had gained much from it. Both sides had fought hard. The dead were buried ; some in Elsdon Church and some on the battle-field. The captured knights paid their ransoms ; the victors became rich overnight. There were no atrocities to be remembered with bitterness ; much to be remembered with pride.

Otterburn, then, was a battle famous not for its effect on world history, not for its tactical lessons, nor for the number of its dead but only, perhaps, because it was the last of the private battles and fought between enemies who were, in a strange way, almost friends.

APPENDIX.

Froissart and his Translators

Sir John Froissart wrote his "Chronicles of England, France and Spain" in the course of the latter half of the 14th Century under the patronage in turn of Edward III, the Black Prince and the latter's son, Richard II. During the troubled times of the last king's reign, Froissart moved to France to join the household of another valued patron, the elegant but unscrupulous Count Gaston de Foix, Sire de Coucy. It was here that he met the four men whose experiences at the Battle of Otterburn formed the basis of his account.

His books of history and romance were, of course, written and copied by hand as required and presented to his various patrons. It was not until 1505 that a printed edition of the Chronicles was published in black letter. This edition is quite rare and only to be found in some public libraries and private collections. As far as I know, verbatim editions of the Chronicles do not exist apart from the original ones in

black letter, but I am open to correction and would be pleased to hear of the existence of others if they are accessible to the ordinary reader. Through the courtesy of the National Library of Scotland, I have been able to provide for the present reader a photostat copy of the relevant chapters of the 1505 edition which cover the story of the battle.

In 1525, on the orders of Henry VIII, Sir John Bouchier, Lord Berners wrote and published a translation which was reprinted with notes in 1808. These notes are not, as far as the account of the battle of Otterburn is concerned, absolutely reliable. The translation is in the English of the period.

The only other translation is that of Thomas Johnes of Hafod, published 1803-10. This is in modern English with notes and has been the model for nearly all accounts of the battle since that date. The translation is a very readable one, but the notes cannot be taken without question and follow those of the Bouchier translation. These notes appear to stem from the activities around the supposed site of the battle-field in 1777.

When we return to the original edition in French, we see what Froissart actually wrote, working from a cross-examination of his four witnesses, two of which were Scotsmen and two virtually French. It is not likely that Froissart in his English travels actually visited Otterburn, if indeed he had ever heard of it before the battle and he seems, throughout his account, to think that "Otterburn" refers not to a stream but to a "bourg," or castle, spelling the word variously as, "Octebourt," "Octebourch" and even, "Montbourg," whilst there is no doubt that the *place* where this "castle" stood was translated by him from the name given to him by his Scots informants as "Combure."

From all this interesting if obscure material I have endeavoured to make some sense in relation to what can be seen and found on the ground and in contemporary literature.

"Chevy Chase" and the Chevauchée

The ballad of Chevy Chase, so closely connected in every-

one's mind with the Battle of Otterburn, was first brought to the notice of the public in general by Thomas Percy who published an up-to-date version in 1765. Percy was one of the literary characters of the 18th Century. Born in Shropshire and ordained into the Irish Church, he liked to claim descent from the Percies. After various literary ventures, he became librarian at Alnwick Castle where he did much to glorify the name of Percy by the revival, re-editing and, no doubt, embellishment of local ballads and stories. His sight failing towards the end of the Century, he died an Irish Bishop living and working in his diocese, leaving behind him a wealth of material.

The song or poem of Chevy Chase is thought to be derived from another, "The hunting o'er the Cheviat" first sung if not composed by Rychard Sheale about 1550. The song, in its later form, is a long one and covers the period from Otterburn until the battle of Homildon Hill and is of doubtful value as history, but the interesting part of it is the title which, in itself, means nothing. However, the term "Chivauche" or "Chevauchée" was in common use both in England and in France at the time of the battle and means, in fact, an expedition or raid of mounted men. Froissart uses it constantly both as a substantive and as a verb. It appears in various letters recorded in the "Calendar of Documents relating to Scotland" Vol. III. In 1316, the Prior of Carlisle complains of expenses caused by a "chivauche" made by the Wardens of the Marches to bring back Robert le Bruce. The root is obvious. Thus we have the memory of an obsolete term transformed into an attractive but meaningless song title.

It is just possible that it is a play on the fact that the battle was fought within Otterburn Deer Park. Apart from the opportunity provided for myself to give a dissertation on the origin of the title, Chevy Chase as an account is relatively valueless.

Chronology of the Otterburn Campaign

August, 1388.

8th-9th—Scottish Council of war at Southdean Church.

9th-10th—Scottish army marches from Southdean to Tyne.

10-11-12th—Scots raid Durham County.

13-14th—Scots march from Durham City to Newcastle.

15-16-17th—Scots invest Newcastle.

18th—Scots march to Otterburn Manor Bastle House, capturing Ponteland Bastle House en route.

19th—Scots besiege Otterburn Manor Bastle House. Northumbrians march on foot to Elsdon from Newcastle and attack Scottish army in camp on Fawdon Hill at dusk. Northumbrians defeated and survivors retreat to Newcastle. Bishop of Durham arrives at Newcastle in evening with 7,000 men, advances towards battle-field but has to retreat to Newcastle.

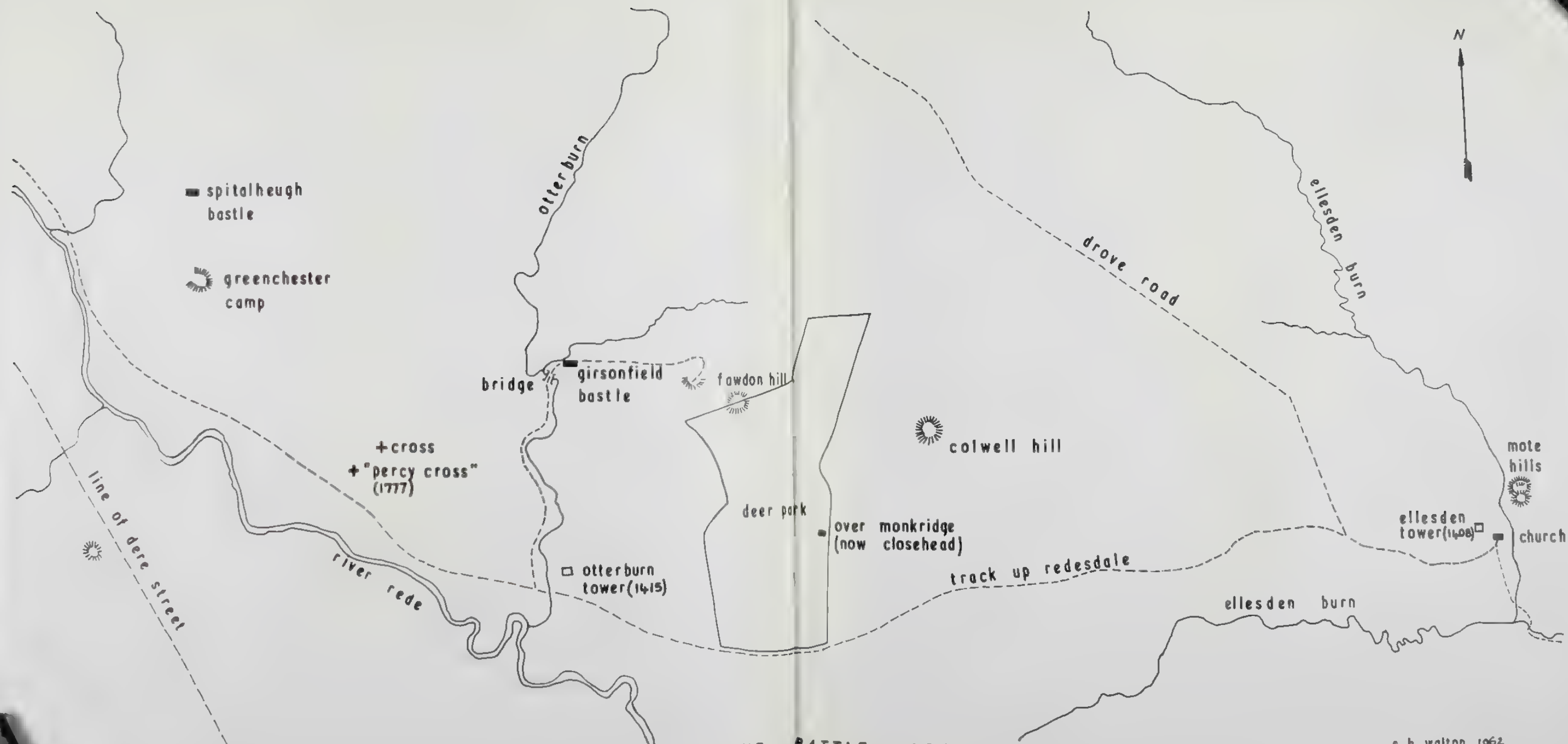
20th—Scottish army, less 200 knights captured by enemy in the course of the pursuit, reorganize battle-field and build triple dike in preparation for arrival of Bishop's army. Bishop arrives with 10,000 men at 4 p.m. but retreats without a fight.

21st—Scots bury dead of both sides. Arrange for ransoms of prisoners and march to Drove road carrying bodies of Douglas and Glendenning and taking a few of the most important prisoners. Camp on Border, probably at Chew Green.

22nd—Scots march from Border to Melrose.
End of Campaign.

Discoveries on the battle-field 1961

In October, 1961, when the battle-field was identified as such by myself and Mr. W. Ryle Elliot, there was not much time left of the fine weather in which to do the necessary excavation to verify that there were, indeed, bodies buried beneath what appeared to be graves. The first examination of the site showed a large number of oblong groups of stones



CONTEMPORARY GEOGRAPHY OF THE BATTLE AREA

r. h. walton 1962

in various places and, in addition a number of large, flat mounds of stones. A rough count revealed that there were nearly a hundred "single" graves and about twenty round "mass" graves of up to ten yards in diameter. All the stones were only just above the level of the ground, or could be found by probing. It was also clear that these stones had come from the remains of the Deer park wall which flanks the battle-field, and were of the common sand-stone of the district.

In order to provide suitable illustrations, the first grave opened was some way from the main battle-field and was of exceptionally regular form. On removing the turf covering, it was clear that a layer of stones had been packed together over an area of about five feet by two. We photographed each stage of the operation removing the stones carefully. We did not know whether or not the body was buried or even if there was a body. Directly beneath the stones we found nothing but yellow sand, so we replaced the stones and made a cut into one of the circular "mass" graves on the main battle-field. Here we found that the level of soil could be seen to have risen nearly a foot since the time of the battle and that there was an immense amount of stone below the surface. Again, we found nothing but a thick layer of yellow sand. It might be said here that the normal sub-soil on the site is silver sand and humus mixed.

Still puzzled by these results, we filled in the hole and started on a single grave. Here we took out a large amount of stone and found the usual yellow sand but, by baring an area about five feet by four, and scraping the surface away very carefully, we noticed the appearance of a layer of rust which seemed to have fused onto the sand to make a definite crust. By long and slow work, we noticed that this crust was taking the shape of three curved surfaces of different sizes and that elsewhere in the excavation more rust was appearing. The outcome was that we found that we were uncovering a complete body lying on its right side, covered with the remains of what had been, perhaps, a suit of chain armour, covering even the

head. Inside the shape of the body was this same yellow sand which we had noticed before.

My deduction was that, at the time of burial, the body in a state of rigor mortis was barely covered with sods cut from a shallow hole and then stones were heaped up on it to prevent interference by foxes or dogs. As it was summer, the body would soon disintegrate, but the armour would keep its shape on the bones and through this would filter as the result of rain and frost, the sand worn off the stones which, when broken show a deep yellow colour. This sand would soon fill the body cavities and, when the oxidization of the iron was complete, there would be, as we found, a perfect cast of the body.

The yellow sand found elsewhere came from the same source, but we were unable to find traces of the body or bodies because there happened to be no armour on them to form a crust.

I received much advice and assistance from Mr. Denton of the Home Office Forensic Laboratory, Gosforth and he informed me that, in his opinion, no traces of bones would remain after so long a period but that teeth should still be intact if found.

Lastly, this single grave which measures nearly sixteen feet from end to end, contains, apparently, a number of bodies which have been laid down side by side, as there are traces showing of another body beside the one on which we are still working.

When the weather improves this year, we hope to make some further progress in identifying the form of armour and the methods of burial. One surprising thing came to light. I found the dried fragments of the original turf of 1388 crushed flat under one of the lower stones.

The Triple Dikes

The Triple dikes which figure so prominently to-day in any view of the battle-field and which I have suggested were

erected on the day after the battle as a special defence against the Bishop's knights, cannot be proved by concrete evidence to be contemporary with the battle. It is certain that they were erected *later* than the park wall and all other adjacent earth dikes, and that they are extensions of the wall at one point and of one earth dike.

There is the evidence of Wintoun's account that *some* defensive work had been done since the battle and before the arrival of the Bishop's army. The dikes extend almost to the present main road and it is hard to see why they should have been built so far south of the battle-field except as a very thorough defensive measure, in view of the immense labour involved.

The last thing to decide is whether, in fact, it would have been possible to build the dikes in a matter of twelve hours.

The total length of the dikes is about 1,800 yards. There were nearly two thousand Scottish soldiers left after the battle, possibly several hundred servants and at least a thousand prisoners.

There should have been, therefore, one man for every yard of dike at least. Where did the spades come from, or could turf be dug in some other way? It is well known that soldiers, then as now, were always digging at the time of a battle. As it is also certain that soldiers did not carry spades with them at this time, it is probable that these tools were readily available from any farmstead and were much more used than they are to-day and, therefore, more numerous.

In this case, Durham had been looted most thoroughly. It is hard to imagine what portable plunder was to be found on the average farmstead other than agricultural tools.

I see no difficulty in the digging of the dikes *if* we can imagine a sufficient supply of spades being available. That these *were* available I deduce from the fact that, in the grave which has been examined in detail on the battle-field, I found, crushed by the lower stones, pieces of turf lying directly over the "body," showing that the latter had been placed in a

shallow depression from which sufficient turf had been cut by some instrument to cover the body itself before the stones were piled upon it.

The height of the dikes, originally about four feet, is sufficient to have served to force a knight to dismount but is insufficient for any other obvious purpose connected with agriculture.

Until some more satisfactory explanation for their existence is put forward, I must maintain that these dikes are contemporary with the battle and erected in connection with it.

The English system of defence in the North

Close reading of the foregoing account of the battle, may leave the reader in some doubt as to who was really responsible for the defence of the Border at this time. The answer is that, primarily, there was a defence council composed of senior members from the counties of Northumberland, Durham and York and the independent town of Berwick. In addition there was a Warden of each of the three "Marches" of the Border engaged and paid on an Indenture of three years at a time. For instance, Henry Percy eldest son of Henry Percy, Earl of Northumberland, undertook the Wardenship of the East March from 19th June, 1388 for three years at the rate of £12,000 per annum reduced to £3,000 in time of truce.

In time of war, it appears that the Council took command, the Warden of the East March being subordinate to the Council.

At the time of Otterburn, the Council was led by the Earl of Northumberland and other members were: Walter Skirlaw, Bishop of Durham and nominally military commander of the Palatinate of North and South Durham, The "Seneschal" of York and Sir Matthew Redman, Governor of Berwick.

Thus, we have the situation that, although the renowned "Hotspur" was the Warden of the East March, he was under the orders of his father, the Earl of Northumberland, who took responsibility for the outcome of the campaign.

ACKNOWLEDGMENTS

In the course of pursuing my researches into the history of the battle, I have been very conscious of the help and encouragement accorded to me by Mr. W. Ryle Elliot and Miss Grace Elliot whose combined knowledge of history, heraldry and the kindred arts have been of the greatest assistance to me.

I would like to express my thanks to the Librarian of the National Library of Scotland for permitting me to publish with this paper the photostat copy of Froissart's account of the battle from the Edition of 1505.

In the course of investigating the graves on the battle-field itself, I received every help in the search for organic material from Mr. Denton of the Home Office Forensic Laboratory, Gosforth, Newcastle-on-Tyne.

Lastly, I must give the greatest credit to the late Robert White, whose "Battle of Otterburn" 1857, contained the most exhaustive Appendix on every matter in connection with the writers and personalities connected with the battle. It was with regret that I was forced by circumstances to be at variance with him on the matter of the site of the battle itself.

SIR JOHN FROISSART'S CHRONICLES OF
ENGLAND, FRANCE AND SPAIN.

Edition of 1505.

Vol. III.

Photostat extract from page 108 to page 117.

Matter relating to the Battle of Otterburn, August 19th, 1388

National Library of Scotland.

May 1st, 1962.

Des francos

ne/ & abatre bops de bās les lieus ou on na
uoit oncques passe ne cōuerse. Et a grāt pai
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plusieurs autres pour venir a luxembourg
& la veoir le roy & plet a sup. Et passa la meu
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& le duc de guerles son filz nen faisoit com
pte nul/ & disoit. Or les laissez venir/ p^{re} viē
dront auāt & plus se laisseront/ & eulx et leur
controy affoiblirōt & adnichileront leurs po^{re}
neāces/ & si est sus spuer/ & se iourne en fors
pays. Ilz ny entreront pas a leur aise et si
seront reculez/ & a la fois autrēmēt que de trō
pettes. Il leur fauldra tousiours estre ensem
ble ce quilz ne pourroient faire silz veulient
entrer en mon pays. Et silz se desfontēt noz

et guerlos

gens en auront vueillent ou noiz. Mais tou
teffois au d'ap dire nostre cousin de france
est de bonne volente & de grāt emprise/ car
il monstre & fait ce q il deusse faire. Ainsi di
uisoit le duc de guerles a ses cheualiers/ & le
duc de iuliers pesoit & estoit tout ebbay/ car
il deoit bien q si les francos vouloient tou
te sa terre seroit arse & perdue/ si manda son
frere larcenesque de coulougne & son cousin
lenesque du liege/ messire arnoult de homes
pour auoir conseil et pour scauoir cōment il
pourroit remedier a la fin que sa terre ne fust
espillee ne gastee. Les deux plat/ le cōseillē
rent a leur pouoir & sup dirent q sup conue
noit soy humilier enuers le roy de france et
ses oncles & venir a obeissance. Le duc re
spondit q tout ce il seroit volentiers

¶ Cōment messire heryp de
signac fist son raport au duc de
berry/ & cōment les barons des
coce s'assemblerent en la cite de
berban po^{re} auoir pscil de met
tre sus vne armee pour courir
en angletre/ & dūng escuyer an
glois q les barons descoce pū
drent q scauoir toute lempāse
& le secret des deux royaumes
ce lassauoir descoce & dāgleterre



¶ Donc par le cōseil de leuef
que du trect q la estoit & aussi
de larcenesque de coulougne
se departit l'uesque du spege
en son arroy pour venir a lē
cōtre du roy & traicter de ses besongnes. Le
Roy de france approuchoit tousiours/ mais
cestoit trois ou quatre lieues ou deux le iō^{re}
& bien souuent point/ car l'arroy quil menoit
estoit trop grant entre moisy et nostre da
me damot. La ou le duc de berry & toute sa
route ou plus auoit de cinq cens lancees/ si
ent logez/ & vindient vñ iour messire guil
laume de lignac & messire heryon son frere.
Messire guillaume venoit du siege de van
chabour/ car le duc lauot mande. Et le duc

l'avoit mande. Et le Duc de Bourbon messire iehan bonne lance. Et avoient au siege laisse to⁹ leurs gens & pour capitaines messire iehan bouteillier & messire lops d'ambiere/mais ilz vouloient estre en la chevanchee & voyage du roy. Et messire helpon venoit de gascongne & de bayonne de parler au duc de lancastre pour le mariaige de sa fille si come vous scauez. Le duc de berry sup fist bone chiere et sup demanda des nouvelles messire helpon sup dist assez/ & sup en dist q le roy de castille p^ucaroit bien d'autre part a venir a poip au duc de lancastre & traitoit fort pour son filz le prince de galles a venir a ce mariaige. De ceste parolle fut le Duc de berry tout pensif & dist. Messire helpon vo⁹ retourneriez en france ie vous y enuoyeray encoires ung coup plus a certes que vo⁹ n'y auez este/ & leuesque de poitiers Mais pour le present nous auons charge assez Et celle sepmaine retourna le sire de coucy qui estoit alle en aignion & vint deuers le Roy a darbane. Ilz furent tous resioy⁹z de sa venue.



Vo⁹ scauez comment le roy d'angleterre auoit este trouble & enesmoys le temps passe Le roy richart contre ses oncles/et ses oncles contre sup. Et souverainement d toutes ces incidences estoit demande le duc d'irlande come il est contenu en nostre hystoire dont plusieurs cheualiers en angleterre auoient este mors & decolez/ & l'arceuesque d'orth frere au seigneur de newfuille sur le point de perdre son benefice/ & par le nouuel p^{re}seil des oncles du roy & de l'arceuesque de catorbie le seigneur de newfuille qui auoit bien tenu cinq ans la frontiere de northbelleande a leu cõtre des escocops auoit este casse de ses gaiges/ car il pieuot to⁹ les ans. p^{re} vii. mille frās sus la seneschausee d'orth/ & leueschie de durement. Et pour garder labide frontiere de northbelleande fut mps messire henry de parcy/ & faisoit celle frontiere par an po⁹

pi. M. frans dont ces seigneurs & leur lignage quop quilz fussent parens & amps & doi⁹ fins l'ung a l'autre auoient grant empe hopyne & indignacion l'ung contre l'autre & tout ce scauoient bien les escocops. Si sadmiserent les barons descoce & les cheualiers une foiz quilz mettroient sus une armee & seroient d ne chevanchee en agleterre/ car il estoit tẽps & heur & sentoient assez que les anglis ne estoient pas bien d'accord/ mais en differrent. Et au temps passe ilz auoient receu par eulx tant de grosses husses quil estoit bien heur quilz en rendissent une belle & tout a certes. Et assuy que leurs affaires ne fussent point sceuz ilz ordonnerent une feste sur la frontiere de la sauuaige escoce en une cite nommee berbane/ & la furent ou enpartie tous les barons descoce. A celle feste fut obligie & ordonne & conuenance q a la mp aoust qui fut lan de grace mil.ccc.iii. pp. & viii. ilz seroient to⁹ & chascun a toute leur puissance sur les frontieres de galles a ung chascun de hautes foressz que on dit gedours. Et sur cest estat ilz se departirent l'ung de l'autre Et sachez que de ceste assemblee quilz auoient ordonne de faire ilz nen parlerent oncques a leur roy ny nen firent cõpte. Car ilz disoient entre eulx quil ne scauoit guerroyer. A la ioint de l'assignacion qui fut faicte a Gedours vmbient tout premierement/ le conte James de donglas/ messire iehan conte de moiet/ le conte de la marche & de dõbarre/ messire guillaume de fui/ messire estuene cõte de monstreos/ messire guillaume cõte de la marche/ & messire Arcebauld de donglas/ messire robert amercequi/ messire marc obrennen/ messire guillaume de lindesec/ & messire iaques son frere/ Thomas de berry/ messire alipandre de lindesec/ le sire de sechy/ messire iehan de sobelans/ messire patrie de dõbarre/ messire iehan de fait clar/ messire patrie sobopdone/ messire iehan filz du seigneur de mancabie et ses deux filz/ messire iehan malisnel/ messire adam de glasbun/ messire guille de

Des escocops.

rebatin/messire guillaume stanac/messire
iehan de balpebireton/messire aluier/et mes
sire robert landie messire estienne fresier/mes
sire Alipandrie de ramesap/et messire iehan
son frere/messire guillaume de moibereth/
messire maubert pere/messire Guillaunie
de yballerem/messire Jehan a monistay/
dauis suam/robert coellenie/et moult d'au
tres cheualiers et escarpers descoce. Oncques
depuis loiz ante ane ne se estoit trouuez tant
de bonnes gens en eschie/et estoient bien. vii.
cens lances/et. xl. mille homes parmi les car
chiers. Mais quant du mestier de l'arc escor
cois en escamiet petit/ainscops portent chascun
sur son espaulle sa hache et se approuchent tã
tost en la bataille/et de ses haches donnent
trop beaulx honores. Quant ces seigneurs
se furent tous trouuez en la marche de Ger
dours furent mon. i. liez et dirent que iamais
en leurs hostels ilz n'entreroient quilz auroi
ent cheuauche en angleterre et a ce li auant
qu'on en parleroit vingt ans apres. Et pour
scauoir encoires plus certainement ou ilz se
trouueroient ne comment ilz se trouueroient
les barons qui estoient cappitaines de tout
le demourant du peuple assignerent vng ior
entre eulx a estre en vne eglise en vne lan
de sur la forest de gedours qu'on appelle ou
pape yedon.



Danielles estoit venues
en norfombellande. Car
on ne fait riens qui ne scait
seu qui bonne diligence y
met au cõre et a ses enfans
et au seneschal dionh/et a
messire matthieu tameden cappitaine de bar
nich de l'assemblée et feste qui auoit este fur
te en la cite de bixbane. Dont pour en sca
uoir la verite/et a quelle instance elle estoit
fuite ces seignors y auoient enuoye tout cou
uertement heraulx et menestriers. Les esco
pops ne sceurent si secretement prier ensemble
ne faire leur besongne que ceulx qui enuoyez
furent d'agleterre en escoc en sceurent bien

et anglosops

et l'apparant en dient que le pape sefmon
uoit et mettoit ensemble adenoient auoir les
seignors descoce vne iournee de parlemẽt en
semble en la forest et ou chastel de gedours.
Tout raporterent ilz a neuf chastels sur chun
a leurs maistres. Quant les barons et cheua
liers de norfombellande furent informez de cest
affaire si se pourueurent et furent sur leur
garde. Et assinz que les escocops ne sceussent
niens de leurs zuenanceone de leurs secretz
parquoy ilz ne rapissent leur empriue. To
se tindrent a leurs chasteaulx et maisons/mais
ilz estoient abaisez de partir si tost que les es
cocops cheuaucheroient/et auoient ainsi as
mise. Si les escocois cheuauchent nous sca
urons bien ou ilz se traierẽt filz dont vers car
duen ne carion en galles/no^z entrerẽs dan
tre part en leurs paps a leur porters plus de
dommage assez quilz ne nous peuent faire/
car leur pape est tout desloz. Or y entre a
tonoiez et nostre terre est faite/et sont les vil
les et les chasteaulx bien fermeez. Et sur cest
estai encoires pour scauoir comment ilz se de
uiseroient ilz enuoyerent de respief vng an
giops gentu home qui bien congnoissoit tou
tes les marches descoce voire la forest ou ce
ste assemblee deuoit estre Et tant enploia
iescaper angiosops sans estre apperceu ne as
mise qui vint en leglise de yedon ou ces sei
gneurs estoient et se bount entre eulx ainsi ad
me vng seruant fait aps son maistre et sent
vne grant partie de l'entente et empriue des
escocops. Sur la fin du plemẽt il sen vouloit
partir si vint a vng ardre ou il auoit attache
son cheual par la regne et le cyphs trouuer/
mais pour ne le trouua car vng escocops q
sont grans iarrons luy auoit embie Il ne o
sa sonner mot/et se mist a chemin tout de pie
douse et esperonne. Ainsi q'il auoit eslongne
le monstier le trait d'ung ardre deux fois il y a
uoit la deocheualiers descoce qui deuisoient
entre eulx. Dunt l'ung deulx qui premiere
ment si addona. Je voy et ay deu merueilles
Deez la vng homme tout seul qui a pũ son

Facilet.

cheual comm: ie espere/et nen a sonne mot
Par ma foy dist il/ie faz doubte quil ne soit
poit des nostres. Di tost apres pour scauoir
si ie dy vray ou non. Tantost escupers che-
uauchèrent apres luy et le aconsupuièrent.
Quant il les sentit sur luy si fut tout esba-
hy/et voulsist bien estre ailleurs. Ilz le un-
ronnerent de tous costez: luy demanderent
ou il aloit ne dont il venoit/et quelle chose
il auoit fait de son cheual. Ilz commenca a
barier/et ne respondit point bien a leur pro-
pos. Ilz le tournerent et dirent quil conue-
noit quil alast parler a leurs seigneurs. Et
ainsi fut il ramene iusques au mostier de ze-
don/et presente au conte de donglas et aux
autres qui tantost le paminerent/car ilz vi-
rent bien quil estoit anglois. Adonc ilz vou-
lurent scauoir la verite qui lauot la amene.
Trop eulz la diront. Et toutesfoyz il fut me-
ne si auant quil cogneut toute la verite/car
on luy dist que sil ne la disoit sans mercy on
luy coupperai la teste/et que sil disoit verite
que il nauoit garde de mal. La congneut il
pour sa saluacion que les barons de norfom
bealande lauoient la enuoye pour scauoir le
stat de leur cheuauchee/quelque part ilz vou-
loient traire. De ceste parolle furent les ba-
rons grandement resiouy: et ne voulsissent
pas pour nulle menz qils ne lessent retenu: et
parle a luy. Adonc luy fut demande quelle
part les barons d norfombealande estoient et
se entre eulz estoient nulles apparences de
cheuaucher/quel chemin en escocce ilz vou-
loient tenir ou selon la marine par baruich/et
par Dombarte/ou le hault chemin/par la
conte de montres: et deuers strumelin. Il res-
pondit et dist. Puis quil conuient qui ie con-
gnoisse verite ie la diray. Quant ie me party
deulz d neuf chastei: sur chi il nestoit nul ap-
parant de leur cheuauchee/mais ilz sont to-
pouruen: pour partir du iour au lend main
Et si tost quilz scauront que vous cheuauche-
rez: et que vous entretrez en angleterre ilz ne
viendront point au deuant. Car ilz ne sont

Lip.

pas gens assez pour combattre si grant pen-
ple quoy dit en angleterre que vous vous
mettez ensemble. Et quel nombre dit on en
norfombelande demanda le conte de nioet
que nous serons. On dit seigneur respondit
lescupet que vous serez bien quarante mille
hommes et. vii. cens lances. Et pour briser
vostre fait si vous prenez le chemin de gal-
leailz prendront la voye de baruich pour ve-
nir par dombarte en andebours et a daigues-
t. Et si vous prenez le chemin la ilz prendront
le chemin de carduel et de carlion pour en-
trer par les montaignes en ce pays. Quant
les seigneurs descoce eurent ce ouy si cesses-
rent de parler et regarderent luy laire.
Adonc fut prins lescupet anglois et recom-
mande au chastei d'ay d'gébours quil le gar-
dast bien et quil en rendist bon compte. Et
puis parierent ensemble/et eurent conseil et
nouuel aduisee ce propie lieu de zedon.



Rocestoit resiouys les ba-
rons descoce et tenoient ce-
ste aduantage a belle de ce
quilz scauoient ainsi verite-
ablement le conuenant de
leurs ennemis/et regar-
rent sur ce comment ilz cheuiroient. Les plus
saiges et les mientz wisez barons parlerent.
Le furent messire archambaud de Don-
glas le conte de fui/ messire alipandrie de ra-
mest/ messire iehan de saint clare/ et messire
iacques de la linsee et dirent. De paour de
faillir a nostre entente nous cōseillons que
nous facions deus cheuauchees pour nos
aduersaires ne scauront auquelz entendre/
et la plus grant cheuauchee et tout loist et no-
stre sommaige. et charroy sen voyse vers car-
lion en galles/et lautre cheuauchee de trois
ou quatre cens lances et. ii. mille gros barietz
et archiers et to bien mōtez car il le cōuient/
quilz sen voysent vers neuf chastei sur thum
et passer la riuierere rentrent en leueschie d du-
rem arban et epistat le pape. Ilz feront bien
grant cray en angleterre auant que nos en-

Des escocops

nemps soient pourueu; Et si nous voyons
et sentons quilz nous poursuivent ainsi que
ilz feront si nous remettrons ensemble et
nous trouverons en bonne place et nous
combattrons. Aussi en auons nous grant
desir/ et faisons tant que nous y ayons bon
neur. Si est heure pays que nous nous trou
uons tous ensemble que nous leurs mon
strons les domages quilz nous ont faitz. Le
conseil fut tenu et ordonnerent que messire
berchambau de donglas/ le conte de fu/ le
conte de Barclan/ le conte de monstres/ le
conte de mare/ le conte dastroberne/ messire
estienne fresiel/ messire george de dombarte
et seize bien grans barons d'escocce menerent
la plus grant partie de lost vers carlton. Et
le conte de donglas et messire deouge conte
de mare et dombarte/ et le conte Jehan de
mozet: ces trois seroient capitaines de trois
cents lances de bonnes gens a election et de
deux mille hommes gros barletz et archie
ers/ et sen vroient verser le neuf chasteil sus
thun et entreroient en nossement. La
se departirent ces deux ostz l'un des autres
et prurent au departement trop affectueuse
ment les seigneurs l'un a l'autre que si les
anglois cheuauchaient et les poursuui
ent quilz fussent despiez de non combatre tant
quilz fussent tous ensemble. Si en seroient
plus forts et leurs affaires si en valloient
mieux. Ainsi se departirent l'un matin de
la forest de gedours/ et prindrent les champs
les uns a dextre les autres a senestre

Comment le conte de don
glas conquist le penon de mes
sire hery de parcy au barriere
deuant le neuf chasteil sus thun
Et comment les escocops ar
rēt le chasteil de pond liea/ et co
ment ilz le prindrent. Et com
ment messire henry de parcy e
messire raoul son frere eurent
aduis de les poursuivre pour

et anglois.

conquister leur pennon quilz a
uoient perdu a lescarmouche.
Et comment lescuyer anglois
qui auoit este enuoye pour es
pies en escocce fut prins enleue
se de jehon.



Dans les barons de nasse
beland si virent que leur
hōne ne retournoit point a
l'entre quilz l'attendoient et
q nulles nouvelles ny en
oyoient ne des escocois an
si/ si entrèrent en suspicion/ pensèrent bien
ce que aduient en estoit. Si signifient sig
a l'autre que chascun se tenist sur sa garde et
tout prest de traire sur les champs aussi tost
que on oiroit nouvelles des escocops/ car ilz
tenoient leur messaigier pour perdu. **E**t
parlons de la cheuauchee du conte de don
glas des autres/ car ilz eurent plus a faire
assez que ceulx qui prindrent le cheun de car
lton et aussi ilz ne demandoient que les ar
mes. Quant les contes de donglas/ et de mo
zet/ et de la mare/ et de dombarte qui capi
taines estoient furent separez des autres a
la grosse route de luy/ et chascun eut pain
sonz cheun/ et commencerent a cheuancer ilz di
rent que ilz passeroient leane/ et entreroient
en leueschie de daren/ et cheuancheroient ins
ques a la cite/ et puis retourneroient ardent
et epillant le pays et viendroient deuant le
neuf chasteil/ et la se logeroient de bans ou des
pit des anglois. Tout ainsi comme ilz lor
donnerent ilz le firent/ et cheuinerent le bon
pas a la couverte du pays sans entendre a
pillage nul/ ne a assaillir chasteil/ tout ne
maison/ et vindrent a la terre au seigneur de
parcy/ et passerent la riuere de **T**hon sans
nul empeschement la ou ilz lauoient ordon
ne a tropz l'enes pres et au dessus de neuf
chasteil assez pres de banpres/ et cheuanche
rent tant quilz entrèrent en leueschie de da
ren/ ou il y a tres bon pays. Quant ilz furent
deuant/ lors commencerent ilz a faire garni

a occire gens & ardoir viues et faire moult de destrourbiers. Encoires ne scauoient le cōte de Noisborne & ande et les barons et cheualiers de ceste contrée tiens de leur venue. Quant les nouueles vindrent a duren et a neuf chastei que les escocops cheuauchoi ent et on en vint moult tost les apparences par les fruy et les fumees qui voloront parmy le pays/le conte de noisborne & ande enuoya ses deux filz au neuf chastei sur thim/et il se tint a ninich/et fist par tout son mandement que chascun se trahist auant de uers le neuf chastei. Et dist a ses enfans. Vous prez a neuf chastei et tout le pays s'assemblera la et ie me tiendrai a Ninich cest sur leur passage/si nous les pouons encloire nous exploiterons trop bien/mais ie ne scai encoires comment ilz cheuauchent. Messire henry de parcy & messire raoul son frere obeurent et fut raison/les vindrent auerq's tous ceulx du pays gentils hommes et vils lains & se recueilloient au neuf chastei. Et cheuauchoi ent les ostz qui ordoi ent et espi loient le pays tant que les fumees en venoi ent iusques au neuf chastei. Les escocops furent iusques aux portes de la cite de duren et liurerent la escarmouche/mais longuement ne fut ce païs se mirent au retour sicome ilz auoient ordonne au commencement/et tout ce quilz trouuoient deuant eulx qui bon leur estoit porter ou emmener silz pouoient. Entre duren & le neuf chastei na q. vii. lieues angloises/mais grant foison de bons pays païs n'y demoura vire si elle n'estoit fermee qui ne fust arse/et passerent le thim la ou passe ilz lauoi ent/et vindrent deuant le neuf chastei et la s'arrestierent. Tous cheualiers et escuyers de la seneschausee diex et de leueschie de duren se recueilloient au neuf chastei/et la vindrent les seneschaulx diex messire raoul de lōbie/messire raoul demerē capitaine de Barnich/messire robert angie/messire thomas grea/messire Thomas holson/messire iehan de fricon/messire iehan de

herbon messire guillaume d'barichon messire Thomas abotton/le baron de helcon/messire Jehan colpedic/et moult d'autres. Et tant q' la ville estoit si pleine qu'on ne scauoit on s'op loger nalllement.



Dant les tropz contes descoce dessus nommez qui capitaines et meneurs estoient de to' les autres eurent fait leur emprise en leueschie de duren et moult tempesie le pays/les retournierent deuers le neuf chastei sicome ordonne l'auoient/et la s'arrestierent et furent deux iours par denant/et tousiours la greigneur partie du loars auoit escarmouche. La estoient les enfans de noisborne & ande de plusieurs cheualiers de bonne volente qui tousiours premeres estoient a l'escarmouche aux barrières. La auoit de lances fers et escarmouche/et fait mainte appetise d'armes. Et la main a main au deuant des barrières les barletz se combatoient. Entre deulx combatierent moult longuement ensemble. Le conte de donglas et messire henry de parcy & par appetise d'armes le conte de Donglas conquist le pennon a messire Henry de parcy. Dont il fut moult courtoise/et aussi furent tous les anglois. Et la dist le conte de donglas a messire henry. Je reposteray tant de vostre prouesse en escocce & le mettray sur mon chastei d'alqueit parquoy on le verra de plus loing. Par diex conte de donglas respondit messire Henry. Vous ne le d'yperez ia de noisborne & ande/soyez de tout ce assure. Vous ne vous en auez que vanter. Donc dist le conte de donglas ainsy. N'y venez doncques querre ennuy en mon logis vostre pennon/car ie le mettray deuant ma loge et ie verray si vous le vendrez oster. A ceste heure la estoit tard. Si cessa l'escarmouche et se retrayrent les ostz en leurs logis et desarmerent et aiserent de ce quilz eurent. Ilz auoient de quoy par especial de chaire tant quilz voloient.

Des escocops

Et firent celle nuyt bon guet. Car ilz cap-
doyent bien estre refusez; pour les parol-
les qui auoient este dictes/mais non furent
Car messire Henry ne trouua pas en son con-
seil. Le lendemain les escocops deslogerent
de deuant le neuf chastelet et se mirent a che-
min deuers leurs paps et vindrent a ung
chastelet et ville qui sappelloit ponclan dont
messire Hamon de alphet est sire/et est ung
moult bon cheualier de norfombellande si
saresterent la. Car ilz vindrent a beure de
prime et entendirent que le cheualier estoit
en son chastelet Adonc se ordonnerent ilz pour
lassaillir/si y surent trop grant assaut et
firent par force darmes quilz le conquerent
et le cheualier dedans. Si fut la ville et le
chastelet tout ars et papa sen partirent et vin-
drent iusques a la ville et chastelet de combu-
te a huit lieues angloisches de neuf chastelet
et la se logerent. En ce iour ny firent point
dassault/mais lendemain a beure de prime
ilz sonnerent leurs busines et sonnerent
tous pour assaillir/et se traissent vers le cha-
stelet lequel est fort assez/car il siet en maretz.
Si y surent ce iour assaut assez tant quilz
furent tous lassez/mais tiens ny firent: et
sonnerent la retraicte. Quant ilz furent ve-
nus en leurs logis les seigneurs se retrais-
tent ensemble en conseil pour scauoir quelle
chose ilz feroient. Et estoient la greigneur
partie daccord que le lendemain ilz se deslo-
geroient de la sans poist assaillir/et se retraye-
roient tout belement deuers carlpon a le-
gens/mais le conte de Donglas rompt ce
conseil et dist. En despit de messire Henry
de parcy qui dist auant hyper quil monsteroit
son pennon que le conquis par beaulx faiz
darmes a la porte de neuf chastelet nous ne
nous partirons point dicy iusques a demy ou
trops iours et ferons assaillir le chastelet de ce
bourg Il est bien prenable si aurons double
honneur et verrez si la dedans il denra querir
son pennon/se il y vient il sera deffenda.

et anglois



La parole du conte de bon-
glas se accorderent tous les
autres tant pour leur honneur
que pour lamour de lay/car
cestoit le pl^r grât de leur ro-
te et se logerent bien et en pais/car nul ne le-
denpoit. Et firent grant foison de logiz dars
biers et de fuciilles/et se fortifierent/enfer-
merent et clourent saigement dangz grans
marescaiges qui la sont. Et a lentre de ces
marescaiges du chemin de neuf chastelet se
logerent leurs barietz et leurs sommages et
mirent tout leur bestial dedans les mares-
et puis firent ouurer et apparer tresgrans
atoarnemens dassault pour assaillir au len-
demain/tel estoit leur intencion. Or vous
diray de messire Henry de parcy et de messi-
re Raoul son frere quelle chose ilz firent. Il
leur ennuoit grandement et tournoit a grât
desplaisance ce que le conte de Donglas or-
noit conquis a la porte du neuf chastelet a les-
car mouche le pennon de leurs armes enco-
res aneques tout ce il leur touchoit pour
lhonneur trop fort les paroles que messire
Henry auoit dictes si ne les pourfuyuoit oul-
tre. Car il auoit dict au conte de Donglas
que point ne emporteroit son pennon hors
dangleterre. Et tout ce il auoit remonstre
aux cheualiers de norfombellande qui estoi-
ent logez aneques lay en la ville de neuf
chastelet. Or capboient les anglois que le co-
te de donglas et ceulx qui a leurs bariettes
auoient este ne furent que labatgarde des
escocops qui la fussent venus escarmoucher
et que leur grant ost fust demourer derriere.
Parquoy les cheualiers de norfombellande
de qui le plus auoient vse des armes/et qui
mieux scauoient comment on se denoit main-
tenir et desbayer si auoient rabatue loppini-
on de messire Henry de parcy a leur pouoir
en disant ainsi. Sire il aduient souvent ex
armes moult de pertes. Si le 2^e de donglas
a conquis vostre pennon il la bien fort achap-
te/car il est venu a la porte le querir et a este

Incident.

bien batu. Une autre fois conquerez vous sur iuy autant ou plus. Mais le vous dirons pourtant que vous sçavez/et nous sçavons aussi que toute la puissance descoce est hors de sur les champs si nous yssons hors qui ne sont nes pas assez pour eulx combatre/et ont faict par l'aduanture ceste saisie pour nous attraire hors. Et se telle puissance comme ilz sont plus de quarante mille/et qui nous desiroient a trouuer nous auoient a leur aise ilz nous encloreroient et feroient de nous a leur volente. Encores vault il mieulx perdre ung penon que deux ou trois cens cheualiers et escuyers et mettre nostre pays a l'aduanture. Les parolles auoient refresme messire Henry de parcy et son frere car ilz ne vouloient pas pssir hors du conseil quant autres nouvelles vindrent de cheualiers et escuyers qui auoient deu les Escocops et lesquelz sçatoyent tout leur conuenant et le quel chemin ilz estoient allez et ou ilz estoient arrestez.

Comment messire Henry de Parcy et son frere atout grans gens d'armes et archiers allerent apres les Escocops pour conquerte leur pennon que le conte de Douglas auoit conquis deuant le neuf chastel sur thym. Et comment ilz assaillirent les Escocops deuant montbourn en leurs lozgis ou ilz estoient.



Comple et dit fut a messire Henry de parcy/et a messire Raoul son frere et aux autres qui la estoient par cheualiers et Escuyers droitz gens d'armes de Norwiche et de Berke qui poursupuy auoient les Escocops depuis quilz se departirent de neuf chastel sur thym et descouurent tout le pays enuiron

Lxi.

ron po^r mieulx aduiser leur fait. Car ilz ne vouloient informer leur fait aux seigneurs que de Berke et dirent ainsi les rappoieront. Mais messire Henry et messire Raoul des ne sçauoir que nous auons poursuivy les Escocops et descouurent le pays tout a l'environ. Les Escocops ont este a pont d'an/et ont prins en son fort messire Baymon alphet et de la sen sont ilz allez deuant Dorebourn. Et la coucheront enuuyt/ nous ne sçavons de demain. Car la se sont ilz arbonneez pour l'ademonter. Et vous sçavons bien a dire que leur grant ost n'est pas avecques eulx. Car en toute esommes ilz ne sont pas plus de trois mille hommes. Et quant messire Henry de parcy entendit ces nouvelles il fut moult reioys et dist ainsi. Or ira au cheualier aux cheualiers/ Car soy que ie doy a bien et a monseigneur mon pere le sac d'or et requerre mon pennon et seront deslogez de la ceste nuit. Cheualiers et escuyers qui oyrent ces nouvelles si accorderent tresvolentiers et s'appareillerent parmy la vallee de neuf chastel. Le propre soir deuoit venir l'enuesque de duren a tout grans gens. Car il auoit entendu a duren que les gros se combatoient des Escocops y estoient arrestez deuant le neuf chastel et que les enfans de parcy et les barons et cheualiers qui la estoient le devoient combattre dont leur squire po^r venir a la reconusse auoit assemble toutes manieres de gens sur le plat pays et sen venoit au neuf chastel. Mais messire Henry de parcy ne le vouloit point attendre. Car il se tenoit acompaigne bien de six cents lances cheualiers et escuyers et bien environ huit mille de pie. Si dy soit que estoient assez gens pour combattre les Escocops qui n'estoient pas trois cents lances et deux mille d'autres gens. Quant ilz furent tous assemblez ilz se departirent du neuf chastel apres dîner et se myrent aux champs en bonne ordonnance Et prindrent le chemin tout tel que les Escocois estoient allez/ et cheuauche

Des escocops

uent vers oledbouch a sept petit collines de
la et tout beau chemin/mais ilz ne pouoient
pas faiz aller pour leogs de pie qui les sup-
noient. Ainsy que les escocops supposoient
dancuns estoient couchez et reposoient. Car
ilz auoient traualle le iour a assaillir le cha-
stel et se vouloient leuer au matin pour as-
saillir a la froidure/et Dee3 cy venir les An-
giops de premiere venue en entrant en le-
logz; capderent que les logz; des Barletz qui
estoient a l'entree que se fussent les maistres.
Si commencerent les angios a cryer par
cy parcy et a entrer en ces logis/ lesquels es-
toient fors assez. Dons scauez que en telles
choses tantoit grant effroy bien tost est leue
et trop bien escheut a point au3 Escocops.
Tout premierement se pouruerent et ab-
auserent que les angios de premiere venue
sembatiroient sur eulx ce non obstant que ilz
ne leur darassent que vng petit. Les esco-
cops furent tous pourueuz et abusez de ce
fait/et semblerent bien que les angios les ve-
noient reueiller. Adonc entropeterent les scri-
gneurs vne quantite de leurs gros barletz a
de leurs gens de pie ou lescarmache estoit
pour eulx ensoigner. Et ce pendant ilz se
ordonnerent/armerent/et appareillerent et
mirent ensamble chascun sire et hommes
darmes la banni. re et pennon de leurs cap-
taines des contes qui deuoient aller et res-
pondre. Car des trois contes qui estoient
la chascun auoit sa charge. Et en ce faisant
la nuyt approchoit/mais il faisoit assez cler
Car la lune luysoit et estoit ou mops daoust
Et faisoit bel a ser3/a si estoit lair copereux
assez attemperement.



En celle ordonnance que le
vous dy se mirent les esco-
cois. Et quant ilz se furent
tous resueillez et mys en se-
bie s'ordonner mot ilz se de-
partirent de leurs logz. Et
ne prirent pas leur chemin devant les an-

et angios:

giops mais cospeterent vne montaigne qui
la estoit qui leur fist grant aduantage. Car
tout le iour ilz auoient abuse le lieu ou ilz es-
toient logez/et auoient entreulx deuise/et
dit ainsi. Se les angios nous venoient re-
ueiller sur noz logis nous ferions par ce par-
ty par tel et par tel/et ce les sanna/ car cest
grant chose de gens darmes quant on court
sus de nuyt en leurs logis. Si depuis ilz ont
abuse le lieu ou ilz se sont logez et dit et di-
se entre eulx par tel party le pouons nous
perdre et gagner. Quant ces angios fa-
rent venz sur ces barletz de premiere ve-
nue ilz les eurent tantost mesmes/mais en
allat dedans les logis tousiours ilz trouoi-
ent nouuelles gens qui escarmachent a
eulx et les ensoignoient. Dee3 cy venir les
escocops tout autour comme ie vous ay ia
dit et a vng faiz ilz sembatirent sur les An-
giops qui ne sen donnoient en garde en es-
crant tous a vne voix leurs cris. Si furent
les angios de cest affaire moult eponnez
et sen renforcerent en prenant pas et forme
et en escryant Parcy/ et les autres Don-
glas. La commença la bataille felonnie et
cruelle et les poulez de lances durs et fors.
Si en y eut a ce premier rencontrer moult
dabatuz d'ung coste et daultre. Et pource
que les angios estoient grant foison a que
moult ilz desiroient a desionfue leurs en-
nemys ilz se arreslerent sur leur pas enpor-
tant a reculant grandement les Escocops
qui furent sur le point de estre desconfitz. Le
conte James de donglas qui estoit ieune et
fort et de moult grant bouliente/ qui moult
desiroit a auoir grace et recomandacion
darmes et bien les vouloit deservir. Si ne
refusoit pas la peine et le peril fist sa ban-
niere passer auant en escryant donglas don-
glas. Messire Henry de parcy/et messire
Raoul son frere qui auoient grant indigna-
cion sur le conte pour ce quil auoit conquis
le pennon de leurs armes au3 barretes de
neuf chascun filz luy vouloient remonstres

Facillet.

fiuz pouoient / et sadiresserent celle part en es-
crivant tout hant parcy parcy. La se trouue-
rent cesdus bannieres et leurs gès ou il y
eust grant appertises darmes. Et lors dy q
les anglois estoient si fors / a ce commen-
cement si bien se combaterent que ilz recu-
lerent les escocops. Et la furent deus che-
ualiers descoce que on clamoit messire Pa-
tris de hepborne / et messire Patris son filz
qui trop vaillamment si acquiterent / et es-
toient deslez la banniere de donglas / a de sa
charge / et la firent merueilles darmes. Et
cuieste la banniere conquise sans faulte se
ilz neussent la este / mais ilz la deffendirent
bien vaillamment au poulcer et au compz
et honours donner a apert leurs gens venir
a la recousse que encoires ilz en sont eals et
leurs hoirs a recommander.



U me fut dit proprement de
ceulx qui a la bataille furent
tant des Anglois comme
des Escocops de cheualiers
et escupers. Car du pape
au conte de foiz et de son li-
gnaige auecques les anglois il n'y eut deus
escupers moult vaillans hommes / et les-
quelz ie trouuay la saison ensuyuant que la
bataille fut entre le neuf Chastel et mont-
bourt a Dataps deslez ie conte de foiz. Je-
han de chastel neuf / et Jehan de cantiron.
Et aussi a mon retour en ceste saison en
uignoy ie trouuay vng cheualier et deus
escupers Descoce du costé au conte de don-
glas / et lesquelz ie cōgneu a me recongneus-
rent par les diables enseignes que ie leur
dys de leur pais. Car des maieunesse ie ac-
teur de ceste hystoire cheuauchay tant par
tout le royaume Descoce / et fuiz bien quin-
ze iours en hostiel du conte Guillaume de
Donglas pere de ce conte James / dont ie
parle presentement en vng Chastel a cinq
lieues de handecourt que on du ou pais dac-
quest. Et ce cōte james ie lauoy deu ieune

Lxi.

filz et bel damoiseil / et vne femme sear qua
on appelleoit Blanche. Et fuiz informé des
deus parties. Car ilz me dirent que ce auoit
este la plus dure bataille et la plus cruelle
et la meulx combatue que iamais bataille
fut ce que ie crop. Car anglois d'ung costé
Et escocops de l'autre sont moult honorez
darmes. Et quant ilz se trouuent ou rencon-
trent ou party darmes cest sans espargner.
Il n'y a entreulx nul boiant que lances / es-
pees / haches / et dagues peuent dater ilz fie-
rent et frappent l'ung sur l'autre. Et quant
ilz se sont bien batuz et que l'une partie obti-
nt ilz se gionfient tant en leurs armes / et sont si
resioys que sur les champs ceulx qui sont
purs et frances sont ranconnez. Et s'au-
ez vous comment si prestost et si courtoisement
que chascun se contente de son compaignon /
et que au despartement ilz dient grant mer-
cy. Mais en combatant et en faisant armes
l'ung sur l'autre il n'y a point de ieu ne despar-
gne / aucuns est tout a certes et bien le mon-
strent la ainsi que ie vous diray ains que me
parte de la besongne / car ceste rencontre fut
aussi bien demener au droit darmes que nul
le chose peut oncques estre.

Comment le conte Ja-
mes de donglas par sa vaill-
lance remplit ses gens sus
qui estoient reculez. Et a
moitie desconfiz des An-
glois / a en ce faisant il cheut
naure a mort. Et comment
depuis il fist redresser sa bā-
nierre a fust rasssembler ses gēs.



Mout estoient prestz et entens
ilz et de bonne volente che-
ualiers et escupers d'ung costé

Des escocops

et d'autre a faire armes et a ensuy combatre
 baillamment et ardemment tant que sans
 ce leur duroient La nauoit conarise point
 de spen / mais hardement regnoit en celle
 place de moult belles apprisees d'armes que
 ces ieunes cheualiers et escopiers faisoient
 et estoient si fort iointz l'ung a l'autre et ata
 chiez que trait des archiers de nul costen
 auoit point de spen. Car ilz estoient si pres
 assemblez que main a main et l'ung debans
 l'autre. Et encores ne biansioit nulle des
 batailles. Et la se monstrent les escocops
 moult pieus et hardiz et combattoient spee
 ment et de moult grant volente. Car les
 Anglors estoient pour ce fait trop contre
 vng. Je ne dy pas que les anglors ne se ac
 quitaissent bien et loiaument / et auroient
 pluschier a estre mors ou pans sur la pla
 ce quant ilz sont en bataille que on leur re
 prouchast la fuyte. Ainsi que le vous dy que
 la banniere de Donglas et la banniere de
 parcy se estoient encontres et gens d'armes
 des deux parties enuyrup l'ung sur l'autre
 pour auoir honneur de la iournee. A ce com
 mencement les anglors furent si fors qu'ilz
 rebouterent bien leurs ennemis. Le conte
 James de donglas qui estoit de grant vol
 lente et de haulte emprise sentit que ses
 gens reculloient / adonc pour recouurer ter
 re et pour monstret baillance de cheualier /
 Il print vne hache a deux mains et se broua
 dedans et fist soy faire voye deuant luy tât
 que nul n'osoit approucher de luy et ouuroit
 la presse. Car il n'y auoit nul si bien arme de
 bacinet d'piaces qui ne le ressongnast pour
 les grantz hachons qu'il donnoit. Et tant al
 la auant sans mesure ainsy que vng her
 cteur qui tout seul cuydoit et vouloit descon
 fire d'autre toute la besongne qu'il fut ren
 contre de trop lances atachees et arreste
 es en venant tout d'ung coup sur luy. L'une
 en le paule / l'autre en la poitrine sur le des
 cendit on ventre / l'autre en la cuyse. Vne

et anglors.

ques il ne se peut deslacher ne oster de ces
 coups que il ne fust porte a terre et de toute
 les lances moult nautre baillamment / des
 pois qu'il fust a terre point ne se releua. Au
 cuns de ses cheualiers et escopiers le supui
 ent et non pas tous. Car il estoit toute nuyt
 et si ne deoit que de lait et de la lune. Les
 anglors scanoyent bien qu'ilz l'auoient porte
 a terre / mais ilz ne scanoyent qui. Car se ilz
 eussent seue que seuefist estre le conte de don
 glas ilz se fussent si resioys et enorgueil
 liz que la besongne eust este leur. Aussi les
 escocops nen scanoyent riens ne ne sceurent
 iusques a la fin de la bataille. Car si ilz
 sent seue ilz se fussent sans recouurer tous
 desespererez et desconfiz. Et si vous diray
 comment il en aduint a ce que le Conte de
 donglas fut abatu et fern de vne hache sur
 la teste tout oultre / l'autre sur la cuisse tout
 oultre. Anglors passerent oultre et nen fi
 rent compte. Et ne cuyderent mpe auoir oc
 cis que vng homme d'armes. Car d'autre
 part le conte George de la marche et de dom
 barre se combatoyent tresbaillamment et
 donnoient moult a faire les anglors aux es
 cocops arrestez la tous cops en supuiant don
 glas sur les enfans de parcy / et la tiroient
 batoient et frapportoient. D'autre part le
 conte iehan de moret sa banniere et ses gens
 se combatirent moult baillamment et sup
 uoient les anglors sur leur rencontre et leur
 donnoient moult a faire tant que ilz ne fa
 voient on entendre.

Comment en ceste ba
 taille Messire Raoul de
 parcy fut durement nautre
 et fiance prisonier par vng
 cheualier escocops au cote
 de moret nomme messire ie
 han masziel.

Fuicet.



C toutes les besonges/bat
tailles & rencontres qui s'ot
cy dessus en ceste hystoire
dont ie traicte /et ap traicte
grandes mopennes & peti
tes/ ceste cy dont ie ple pour
le present en fut lune des plus dures et des
mieuilz combatues sans saintise/ car il ny a
nont homme cheualier nescuyer qui ne se ac
quait & fust soy denoir & tout main a main.
Celle bataille fut quasi peille a la bataille
de beccel/ car aussi elle fut moult bien co
batue & longuement. Les enfans au conte
de no: hombe. Tandc messire henry & messire
raoul de parsp qui la estoit souuerains cap
taines se acqterent loialement par bien co
batte et quasi par le parsp du conte de don
glas fut arreste aduient & cheut a messire raoul
de parsp/ car il se bouta si auant entre ses en
neymes que il fut enclos & durement naure
et rempe a la grosse alapne pnis & fiance
dun cheualier/ lequel estoit de la charge et
du meisme hostel au conte de moiet & appel
loit oy messire ichan malirel. En prenant
et francant le cheualier escocops demanda
a messire Raoul de parsp qui il estoit. Car
il estoit si nupt que point ne le congnoissoit &
messire raoul estoit si oultre que plus ne pou
oit & lay couloit le sang tout auai qui la fois
blissoit il dist. Je suis messire raoul de parsp
Adonc dist lescocops Messire raoul rescou
on non rescou ie vous fiance moy pasonni
er. Je suis malirel. Bien dist messire raoul
Je le dueil/ mais entēdez a mop/ car ie suis
trop durement naure & mes chausses & mes
grufes sont ia toutes empies de sang. A
ces motz estoit le cheualier escocops si enten
tif que delez lay il ouyt crier moiet & au con
te & deont le conte & la banniere droit delez lay
& lay dist messire ichan malirel Monseigneur
tenez ie vous baille messire raoul de parsp
pour pasonnier/ mais faites entendre a lay
Car il est durement naure. Le conte de mo

Le pui

ret de ceste parolle fut resion moult grāde
met & dist. Malirel tu as bien gaigne les es
perons. Adonc fist il venir ses gens & leur
chargea messire raoul de parsp lesquels lay
banderēt & estancherent les playes & tenoit
la bataille forte & dure & ne scauoit encoire
lesquelz en auoient le meilleur/ car ie vous
dy quil y eut la plusieurs pns & rescouffes
faites qui toutes ne vindrent pas a cōgnois
sance.



C et priay la parolle au ie
la laissay au ieune conte de
donglas nomme iames &
celle nupt la fist memētes
de faire armes. Quant il
fut abatu la pisse fut grā
de a lenniron de lay. Il ne se peut resouer
car il fut feru ou corps dune hache a mort.
Ses gens le suiuoient du plus pres que ilz
pouoient & vindrent sur lay messire iaques
de lūdesce & ng sien cousin & messire ichan/
& messire gaudier de saint cler & autres che
ualiers & escuyers. Et trouuerent delez lay
Ing moult gētil cheualier qui touz iours la
uoit supay de pres & Ing sien chappellain q
nestoit pas comme prestre/ mais cōme bail
lant homme d'armes. Car toute la nupt ou
pl⁹ fort de la besongne il lauoit pour sup une
hache en sa main/ & encoires comme bail
lant homme autour du conte se carmonchoit re
batoit & faisoit recoller anglois p les corps
dune hache dont il raot & lancoit roidemēt
sar enlay. Et en cest estat le trouuerēt dōt ilz
lay serrent bon gre & lay tournerent puis
a grant vaillance & en fut en lay mesmes ar
chediaque & chanopne de asiebane. Le pre
stire ie le vous nommeray/ on l'appelloit mes
sire guillaume de noibernich. Au diay dire
il auoit bien corps taillē memētes grandeur
et hardemēt aussi pour tout faire il fut la na
ture moult durement Quant ces cheualiers
furent venus delez le conte ilz le trouuerent
en bien petit point/ et aussi Ing sien cheua
qqq i.

Des escocops

liet dont le bonz dy que toute la nuyt l'auoit
 supap messire robert hert/lequel auoit quin
 ze plapes que de lances que d'autres armen
 tes et gisoit delez le conte messire Jehan de
 saint clar de manda au conte. Loufin com
 ment vous ba. Petitement dist le conte/loe
 en soit Dieu/ il n'est gueres de mes ancef
 seurs qui soient mors en chambres ne sur lietz
 Je vous dy/pensez de moy venger. Car ie
 me cōpte pour mort. Le cuer me fault trop
 souvent. Gaultier et vous messire iehan de
 saint clar rebriez ma banniere/car ceste
 eke estoit a terre. Et mort vng escaper bail
 lat homme qui la portoit daniū cōtemine
 ne voulat estre cheualier celle iournee/ car
 le conte le voulat faire pourtant que en tou
 tes places il auoit este le oultre passe de dōs
 cheualiers & escapero et criez donglas. mais
 ne dictes a amy ne a ennemy que ie soye au
 party ou vous me voyez/car mes ennemy
 sily se scauoient sen reconforteroient et noz a
 my sily se desconforteroit. Les deux freres
 de saint clar & messire iehan de lindescie fūnt
 ce quil en ordonna & fut la banniere releuee
 et esloierent donglas/et pource quilz estoit
 si auant leurs gens qui estoient derriere & q
 ouyrent crier moult hault donglas donglas
 pour venir celle part se mirent en vng mont
 et commencerent ceulx qui lances auoient
 a bouter & a poiser de telle vertus quilz re
 culerent baillamment les anglois et en y
 ent de renuersez beaucoup et portez par ter
 re. Les escocops qui parloient premiers qui
 fūsoient voye si portèrent si baillamment
 en poissant et balant quilz reculèrent les
 anglois moult auant et oultre le conte de dō
 glas qui ia estoit demie/et vindrent a sa ban
 niere que messire iehan de saint clar tenoit &
 estoit auironne et appuye de bons cheuali
 ers & escapero descoce et encores le fut il pl
 quant la grosse roatte tousiours cryoient a
 haulte voyx donglas donglas. La vint le cō
 te de mort & sa banniere bien acompaignie

et anglois

de bonnes gens et le conte de la mare et de
 dombarte aussi/et estoient ainsi que tous re
 freschiz. Quant ilz virent les anglois recul
 ler et ilz se trouuerent tous ensemble si se re
 nouuella la bataille & les bouter de lances
 & les frapiez de haches fut ces bouterz durs
 et fers.

CAdmēt les escocols gai
 gnerent la bataille contre
 les Anglois devant octe
 bonag/et y fūnt pāno mes
 sire henty & messire Raoul
 de parsp. Et cōment vng
 escaper d'angleterre ne se
 voulat rendre/ aussi ne fūnt
 vng escaper descoce/lesqz
 y moururent. Et cōmūt
 leuesque de Darcy et ses
 gens se destourerent et des
 confirent deulx mesmes



Duoy dire /et a parler par
 raison les anglois estoient
 plus foulees et trauaillees q
 nestoient les escocops. Car
 ilz estoient venanz ce iour inf
 ques la du chasset neuf fut
 chym ou bien pa sup liues angliesches & che
 minerent legierement pour trouuer les esco
 cops ainsi que ilz firent dont le plus pour le
 travail du chemin/ quoy que la volente y
 fust bonne et grande hors estoient de leur a
 laine/& les escocops estoient fraiz et nonne
 anly reposez/& tout ce leur balat moult grā
 dement & bien le monstrent au plus fort d
 la besongne. Car en celle derreniere empa
 cte comme cy dessus est contenu ilz reculē
 rent les anglois tellement et par telle ma
 niere que depuis ilz ne peūnt retourner sur
 leur premier pas/et passerent les batailles
 tout oultre Le conte de donglas qui la estoit

atterez en ce dar party cheut en la main du
seigneur de montcombrie vng moult bailliant
cheualier descoce messire Henry de parcy et
se combatarent ensemble moult bailliantment
sans empeschement de nul autre/car il ny
auoit cheualier ne escuyer de l'une partie ne
de l'autre qui ne fust empeschie de combattre
a son pouoir et a son pareil. La fut mene tes
sement par armes messire Henry de parcy
que le sire de montcombrie le parut et fianca.
La deslisez vous cheualiers et escuyers mes
sire marc adriemench/messire Thomas a
uermequin/messire guillaume/messire iac
ques/et messire aliopandrie de l'indesee/le sei
gneur de saulcon/messire iehan de saint de
lan/messire Patrie de dombarre/messire
iehan/et messire gaudier de saint cler/messi
re Patrie de heipbonne/et les deux filz de
messire patrie et messire miado/le seigneur
de montcombrie/messire iehan mesliet/mes
sire iehan gauduuy/messire guillaume de
redoue/messire guillaume struart/messire
iehan de baubieton/messire iehan alibier et
messire Robert landie/et messire Aliopan
die de raimsee/messire Aliopandrie fresiel/
messire Jehan et mousson/messire guilau
me darian/Daniel fremin/Robert colom
me/et ses deux filz Jehan et robert qui fu
rent la cheualiers/et bien cent cheualiers et
escuyers que ie ne puy pas bien nommer/
Mais il ny en auoit nul qui n'entendist bien
et bailliantment a faire sa besongne. Du
coste des Anglois aussi devant la prin
se du seigneur de parcy se combatarent bail
liamment Et se combatarent depuis messire
Raoul delong vie/messire Mathieu rabe
men/messire Robert auenue/messire Tho
mas grat/messire Thomas beiquon/mes
sire Thomas abreton/messire Jehan de lie
bon/messire Guillaume dalsincon/le bar
de helcon/et messire iehan de colpebar/le se
neschal d'ioth/et plusieurs autres et tous a pie
Que vous entendez. La fut la bataille fort
dure et bien combatue/mais ainsi q la fortune

ne tourne quoy que les Anglois fussent pri
et tous baillans hommes et virez d'armes
et quilz assaillirent reculerent et rebouterent
de premiere venue les escocops moult auant
neantmoins les escocops obtindrent la pla
ce et furent tous pains les cheualiers dessus
nommez et encores plus de cent autres ex
cepte mathieu rabe men capitaine de bar
nich lequel quant il vit la desconfiture et que
nul reconuer ny auoit et que leurs gens sup
oient devant les escocops de tous lez et che
ualiers et escuyers se rendoit aux escocops
et francoient iceles Anglois il monta a che
ual et sen partit de la pour son sauuer.



De le point de la desconfi
ture et ce pendant qu'on fian
copt Anglois en plusieurs
lieux encores on se comba
toit fut encloz des escocops
vng escuyer Anglois qui se
appelloit thomas de letem/estoit de hostel
et charge au seigneur de parcy bel homme et
bailliant aux armes et bien le monstra. Car
ce soir la et la nuyt ensuyuant il fisi grant foi
son d'armes et ne se voulat oncques rendre/
ne ne daigna foyr/et me fut dit quil auoit d
deu et auoit dit a vne feste qui fut a noz hom
bellande que la premiere fois que escocope
et Anglois sentrecointeroient en bataille
le il sacquiteroit si bailliantment et loyau
ment d'armes a son pouoir que pour demou
rer sur la place on le tiendrait le meilleur co
batant des deux parties. Et certainement
ainsi me fut dit/car ie ne le vez oncques que
ie congneusse. Il auoit corps taille et mem
bre de bailliant homme et hardy/et tant fisi
de sa promesse que de sonz la banniere du
conte de moiet il faisoit si grant foison dar
mes que les escocops en estoient tous esmer
ueillez et fut occis en combatant. Pour sa bail
lance on leust doulentiers pains et fiance fil
doulx et sen mirent en paine cheualiers et
escuyers/mais il disoit tousiours que non.
Lar il auoit bien estre rescouz La moult e
qqq ii

Des francoys

thomas dallen au party darmes que ie bo^o
dy auecques vng escaper descoc consi du
rop descoc qui sappelloit symon glauduin
qui eut grant piance de censz de son coste .

Je vous dy bien et consieu bien la bataille
elle fut trop fesonne et trop dure iusques a
la desconfiture. Mais quant escocops bey
rent que angloys reculoient & perboient ter
re et se rendoient ilz les trouuoient courtoys
et debonnairez ilz les francoient doulicemēt
& leur disoient. Allez vous seoir et vous desar
mer ie sups vostre maistre. La ne se mouuo
ient depuis nen p^r que filz fussent freres ilz
ne leur faisoient contraire ne domnage. La
chasse commença qui dura longuement et
plus de cinq lieues angloisches. Et saichez
que si les escocops fussent assez gens il nen
fust retourne nulz quilz ne fussent mors ou
pains/ et se messire archambault donglas et
le conte de fū/ le conte de suuant et les au
tres de la grosse route q̄ cheuaioient vers
cartion eussent la este ilz eussent pains leues
que de durer et la ville de neuf chasteil sur
thū. Je vous diray comment



Et propre soir dont a la re
montee les enfans de par
sy estoient partiz & yssiz de
neuf chasteil sur thū sicom
me cy dessus est contenu.

Leuesque de duren a tout
larrieban de la seneschausee de dūr auoit
entre en la ville & y auoit souppes. En seant
a table ymaginations sup allerēt au denāt
que il ne se acquitoit pas bien quant les an
gloys estoient sur les champs & il se tenoit a
la ville si fist oster la table & fist seller ses che
uaulx et sonner ses trompettes et reueiller
gens parmy la ville armer et monter aux
cheuaulx qui cheuaulx auoient/ et gens de
pie sonnerent partirent et yssirent hors d
la ville. Quant ilz furent tous hors ilz esto
ient bien sept mille homes cestassanoir deuz
mille a cheual & cinq mille de pie apainant

guetloys.

le chemin doctebourg ou la bataille estoit et
et la estoit la nuyt venue et cheminert hors
du neuf chasteil vne grosse lieue/ et beez cy
nouuelles qui leur vindrent que leurs gens
se combattoient aux escocops. A ces nouuel
les sarresta leuesque et fist arrester ses gens
Tantost autres vindrent sapant qui estoit
hors de leur alapne. On leur demanda com
ment la besongne alloit Ilz respondirent mal
& lait/ nous sommes tous descōfz/ beez cy
les escocops enchassent. Les secondes nou
uelles ne sont pas pareilles aux autres & cō
mencerent a doubter et a destrouter les au
cuns. Encores tierciement les foibles gens
se commencerent a venir qui supoient tous
comme descōfz. Quant les gens de ceste
uesque de duren virent que ilz rapportoient
tous poires nouuelles ilz commencerent a
eulx esbahir et destrouter tellement que onc
ques leuesque nen peut retenir ensemble. V
cens. Or regardez doncques si grant route
de gens fussent venus sur eulx & les eussent
de pres suiez/ auecques ce quil estoit toute
nuyt au renter en la ville il y eust en grant
pestilence et supposent les aucuns qui se re
connoissent en amies & en telles besognes
que les esbahiz & descōfz eussent eu tel occa
z a entrer en la ville quilz les eussent efforcz
Et par ainsi ilz eussent pains et gaignee la
ville.



Dant leuesque de Duren
qui se tenoit sur leschamps
et qui bonne vouleste
uoit de aller secourir les an
gloys reconfortoit ses gens
et censz de son coste il veit
comment les siens proprement se destroutoi
ent et se mettoient auecques les sapans/ si
demanda conseil a messire guillaumede luf
sy/ et a messire thomas dufford/ et a aucuns
cheualiers qui la estoient quelle chose ilz en
feroient et comment ilz se maintiendroient
Les cheualiers pour leur honneur ne le sou
uoient ou vouloient conseiller/ car de retour

Facile.

ner sans riens faire leur tourneroit a grant blasme/ & d'aler auant perdie a dommaige. Si se tindrent tout cop & plus attendoient et plus amendaissent leurs gens. Adonc dist leuesque. Seigneurs tout cōsidere il ne fait pas son honneur qui se met en peril. Et qui pour ung dommaige fait deup. Nous voyons et osons que nos gens sont desconfiz/ a ce ne pouons nous remedier. Car pour les recouurer vo' deez que a peine nous ne scauons ou nous alons ne quelle quantite de gens nous trouuerōs. Nous retournerons ceste nuyt tout belemē par denuers le neuf chasteil & demain nous nous remettrons tous ensemble & viendrons deoir nos ennemis. Ilz respondirent. Bien y ait par. A ces mots ilz retournerent tout belemē le pas deuero le neuf chasteil. Or regardez la grant defaillance qui est en gens esbahiz & desconfiz/ Ilz se fussent ensemble tenuz ainsi quilz departirent du neuf chasteil & les supans temps avecqz eulx ilz eussent desconfiz les escocops. Cest l'opinion de plusieurs; mais il ne deuot pas estre ne aduenir/ pour ce eurent les escocops victoire

Cōment mathieu rademen se partit de la bataille pour soy cupider sauluer. Et comment messire iagues de lindefee fut pans de leuesque de duren/ et commēt apres la bataille ilz en noperēt cheuaucheurs pour de souuerir le pape



Que il se recorder de messire mathieu rademen qui estoit monte a cheual et de depart de la bataille pour soy sauuer; car luy tout seul ne pouoit pas recouurer la besongne. A son departement messire iagues de lindefee ung vaillant cheualier descoc e

L'p8

estoit assez pres de luy & dit comment messire mathieu se departoit. Messire iagues pour vaillance et pour gaigner vouloit entrer en chasse en ce temps que Rademen se partoit son cheual tout prest et y monta vne haiche a son col & le glaive au poing & suprit le cheualier les grans galotz & eslongna la bataille & les fizo entra en chasse & vint de si pres sus rademen q de la lance il le pouoit bien atteindre sil vouloit/ si luy dist. Ha cheualier retournez ceste honte et blasme de fouyr. Je suis iagues de lindefee. Si vous ne retournez ie vous ferray par derrière de ma lance. Messire mathieu rademen ne sonna mot/ ains se fit son cheual des esperons plus que deuant. En cest estat dura la chasse plus de trois lieues & adunt que le cheual de rademen trespascha desloas/ luy adonques parresta il tout cop et sailla a terre et mist main a l'espee hors du fourreau & le cōfotta de luy deffendre/ & deez cy le cheualier descoc qui cuida fery de son glaive en la poitrine du cheualier anglois/ mais rademen ganchit au coup & ne fut point consuiuy & a ce q'il faillit la lance alla a terre & si aracha le fer. A ce coup rademen sailla auant et fery de son espee sur la lance et la couppa en deux moitez. Quant messire iagues de lindefee vit quil auoit perdu sa lance il gecta le troncon quil tenoit a terre & se mist a pie et repant la haiche quil portoit sur son espalle et la mania gentement a vne main/ car les escocops de ce mestier sont bien vfitē et costumiers et requiert le cheualier de grant boulenē/ et le cheualier aussi se commença a deffendre par grāt art. La tournoyèrent ilz entre eulx deup lūg de la haiche/ l'autre de l'espee moult longuement & ne les empeschoit nul. Finalement messire iagues de lindefee si mena tellement a lestermir et a donner grans blessures sur rademen quil le mist a la grosse laine et le fist rendre a luy & luy dist ainsi. Messire mathieu lindefee ie me rendz a vo' Doire dist le cheualier descoc. Rescomp on

Des escocops

non respon. Je le vueil dist rademen/ Vous me ferez bonne compagnie. Cest verite re spondit messire iagues/ a lors rebouta son espee au fourreau. Messire mathieu de rade men demâda a lindesce. Quelle chose vous lez vous que ie face. Vostre prisonnier suis/ Vous mauez conquis. Et quede chose vous lez/ Vous que ie face respôdit messire iagues. Je retourneroye vous lez. dist messire mathieu au neuf chaste/ a dedâs quinze iours ie me retrairay vers vous en escoc la ou il vo⁹ plaira me assigner iournee. Je le vueil dist lindesce/ Vous serez par vostre foy dedans trois semaines en la ville de bandesbourg/ a ou que vous foyez/ a auez vous es fies mon prisonnier. Tout ce luy conuenâ ca et iura messire mathieu rademen. Lors repnt chascun son cheual qui la pasturoit en lerbage et monta chascun sur le sien a p⁹ bient congie l'ung de lautre / et sen retourna messire Jacques de lindesce en son entente deuers ses gens a le chemin quil estoit venu et messire mathieu rademen sen alla vers le neuf chaste.



Messire iagues de lindesce ne sceut pas bi⁹ tenir le chemin quil estoit venu/ car la lune estoit obscure a faisoit bien bran. Il ne eut pas che uanche dempe lieue que fa ce a face il encontra leuesque de daren/ xpi⁹ de cinq cens Anglops avec luy/ encorres les eust il bien escheue/ sil voulsist/ mais il cuy doit que ce fussent de ses gens qui pourfay noient les anglops. Quant il fut entre eulx les premiers dencontre luy demanderent q il estoit. Je suis respondit il messire iagues d lindesce. A ces motz leuesque de daren nestoit pas loig qui saille tantost auant a dist lindesce Vous estes p⁹ns rendez Vous a moy. Qui estes vous dist lindesce. Je suis leuesque de daren. Et d⁹te Venez Vous dist messire iagues. Par ma foy compaigns res pondit leuesq/ ie viens de la bataille/ mais

et anglops

ie ny ay fera coap de face si men renops po⁹ messay/ a vous en viedrez a u neuf chaste avecques moy. Il le conuient paioque vo⁹ le voulez dist lindesce. J'ay p⁹ns et suis p⁹ns ainsi dont les aduantures darmes. Auez vo⁹ p⁹ns luy demanda leuesq. J'ay p⁹ns et fide en chaste dist lindesce messire mathieu rademen. Et ou est il demanda leuesque. Par ma foy dist il/ il sen reto⁹ne vers le neuf chaste/ car il me p⁹pa q ie le voulsisse a crop re iusques a trop semaines/ a ie luy receu. Alors allons dist leuesque au neuf chaste a la parlez vous a luy. Ainsi retourneret ilz vers le neuf chaste ensemble/ a fut pris nict messire iagues de lindesce a leuesque d d⁹te a eut messire iagues telle aduanture.



Essoubz la banniere du c⁹ te de la mare et de dombare fut p⁹ns cest escuper de gascongne et prisonnier au conte lehan de chastesneuf a dessoubz la banniere au c⁹ te de mozt fut p⁹ns son compaignon gasco aussi lehan de cantiron/ la place fut ia toute desuaree auant que laube du iour apparust. Les escocops se retrayrent a mirent tous ensemble a ennoperet guides a cheualchiers sur les chaps a sur les chemins de neuf chastes pour scauoir silz se recueilloient et remetoient ensemble/ affin que ilz ne fussent surprins en leurs logis/ a fu. Vng bonadais. Car quant leuesque de daren fut reuenu au neuf chaste/ a retraict en son hostel a des arme il fut moult fort pensif/ a ne scauot que dire ne que faire denuy/ car il ouyt dire que les enfans de parsy ses cousins estoit mors ou p⁹ns a tous les cheualiers q avec eulx estoient p⁹ns. Si manda les cheualiers et escupers qui estoient au neuf chaste. Et q⁹ ilz farent venuz a son hostel il leur demanda silz laisseroient la chose ainsi a que trop grât blasme leur aduenoit quant ilz estoient retournez sans veoir leurs ennemis. Ad⁹te eurent ilz conseil que a beure de soieil leu⁹ ilz

faciliet.

s'armeroient et se orbonneroient et se depa-
rtiroient de la toutes gens de pied et de che-
ual et sen proient vers otebourg combatre
les escocops. Et tout ce fut signifié parmy
la ville et sonna la trompette a l'heure qu'il
donnée fut. Si se armerent toutes gens et
assemblerent en la place devant le pont. Et
cnuiron solcil levant ilz se departirent du neuf
chastel et pssirent par la porte de Baruch et
se mirent sus les champs/et parurent le che-
min de otebourg. Et estoient bien dix mil
le que vngz que autres a pied et a cheual.
Ilz ne eurent pas eslongne neuf chastel de
deux lieues quant au escocop fut signifié
que leuesque de Durem qui recueillie a-
voit faicte venoit sur eulx pour eulx com-
batre/et le sceurent par les garbes quilz avoi-
ent establies sur les champs. Or fut infor-
me messire mathieu rademen qui retourne
estoit au neuf chastel et qui avoit ia dit a plu-
sieurs comment il luy estoit advenu de la ba-
taille et de messire iaques de lindesee quil a-
voit prins et recueu/et comment leuesque de
durem l'avoit encontre et estoit son prisonni-
er. Ainsi luy fut il dit de leuesque ou de ses
gens. Mais messire mathieu aussi tost que
leuesque fut party du neuf chastel sen vint
a l'ostel de Leuesque pour veoir son maistre
et le trouva ou il sappuioit tout pensif a une
fenestre. Quelle chose faictes vous cy mes-
sire iaques. Adonc messire Jaques baissa son
pensement et se traya vers luy et luy donna
bon iour et respondit a sa parolle. Par ma foy
rademen aduantage me ya amene/car aussi
tost que vous partistes de moy et ie retour-
naye mon chemin ie rencontray leuesque de
durem/auquel ie suis prisonnier come vous
estes. Si cry quil ne vous fauldra point de
nir a Hamdebouurg pour vous meure a fina-
ce si finerons luy pour l'autre/mais q' moy
maistre le vueille. Nous serons bien d'accord
dist rademen/mais vous disnetes luy avec
ques moy. Leuesque cheuauche et noz gens
et dont combatre les vostres ie ne scay com-

Lxxi.

met la chose se portera/nous le scambos au re-
tour. Je le vueil dist lindesee. Ainsi ces deux
cheualiers messire Jaques lindesee et mes-
sire Mathieu rademen si conioyrent au neuf
chastel.



Dant les barons et cheual-
iers descoce furent informez
que leuesque de durem ve-
noit et amenoit bien dix mil
les hommes si se traitent a co-
seil ensemble pour scauoir com-
ment ilz se maintiendroient ou ilz demou-
roient sur la place/ou se ilz attendroient l'a-
dventure. Tout considere fut dit que ilz de-
mourroient et quilz ne se pouoient traire ne
trouuer en meilleur place ne plus forte ou
cas que ilz en estoient aduisez. Car ilz auoient
grant foison de prisonniers si ne les pouoient
pas mener avecques eulx fors a leur aise et
si auoient foison des leurs blecez/et aussi de
leurs prisonniers/si ne les vouloit pas lais-
ser demorer. Adonc ilz se recueillirent tous
ensemble comme gens de bon conseil: et de
grant fait. En celle recueillie ilz se orbon-
nerent par telle ordonnance et si bonne que
on ne pouoit entrer ne venir sur eulx/foirs
que par vng seul pas et iurerent tous leurs
prisonniers ensemble dont ilz auoient grant
foison que rescoups ou non rescoups ilz demo-
roient leurs prisonniers. Apres tout ce ilz fi-
rent comier leurs menestriers et mener le pl^{us}
grant reueil du monde Et vous dy que esco-
cops ont l'usage que quant ilz sont ainsi en-
semble en armes les hommes de pie sont bi-
enparez de porter a leur col vng grant cor de
corne en maniere dang veneur/et la quant
ilz les sonnent tous a une voix luy grant/
l'autre gros/le tierce sus le moyer et les au-
tres sur le delie ilz font si grant noise que on
les oyt bien aiseement bondir de quatre
lieues/et cest vng grant esbaidissement entre
leurs ennemis/et vng grant esbaidissement
entre eulx/de ce mestier commanderent la

Des escocops.

les seigneurs a iouyr sur lestat et a faire ce que ie vous diray. Quant lenesque de daretm et sa banniere ou bien auoit dix mille hommes que vngz que aultres estoient durement approuchez et quilz furent ainsi que a vne lieue pres des escocops ilz commencerent a cornet et a bondir leurs cors par telle maniere quilz sembloit que les dyables d'enfer fussent par entre eulx descenduz pour faire nospse/et tant que ceulx qui venoient et qui de leur v'saige tiens ne scauoient en furent esbahys/et dura ce cornet et bondissement moult longuement et puis cessa. Et apres vne espace espoir que les anglops estoient pres a vne lieue ou environ ilz commencerent de rechief a cornet aussi hault et aussi longuement comme deuant et puis cesserent. Or approucha Leuesque et sa banniere a toute sa bataille tous rengez et vint a la veue des escocops aussi pres q'il trait d'ung arc deux fois. A ceste heure que les anglops approucherent corneter les menestriers des seigneurs descoce moult hault et moult cler et puis cesserent /et les grans bondissements de ses cors se renouellerent et durerent moult longue espace. Leuesque de daretm se tenoit la dehors deuant eulx et en regardou la maniere et comment ilz estoient fortifiez et ordonnez de bonne facon et mys en tel party et estat que grandement estoient a leur aduantage. Si se consilia a aucuns cheualiers q'la estoient quelle chose ilz feroient. Il me semble que tout conseil et aduise ilz neurent point propos d'entrer sur eulx ne de les assaillir/ mais sen retournerent sans tiens faire /car ilz deoient bien quilz pouoient plus perdre que gagner. Quant les escocops virent que les anglops estoient tous retraitz et que point nestoit apparant quilz eussent bataille ilz se retrayrent en leurs logis et managerent et beurent vng coup et puis s'ordonnerent de partir. Et pour ce que messire raoul de parsp estoit durement nautre si pria a son maistre q'il luy fist grace de retourner a neuf

et anglops

chastel ou la ou mieulx il luy plairoit en norfombellande a estre la et demourer tant q'il fust gary/et si tost quil seroit en point de cheuaucher il se obligeoit par la foy de cheuaucher et de retourner vers luy en escoce fust a hamdebouurg ou ailleurs. Le conte de marte dessoubz qui il auoit este p'ns luy accorda legierement et luy fist appareiller vne lietiere et deliura. Par la caution deussubie plusieurs cheualiers et escuyers qui prisonniers estoient furent la receuz ou mys a finance et prenoient terme da retourner ou da payer ou lassignaciõ estoit faicte. Il me fut dit par linformation de la perte deussubie/cest assauoir des escocops que a ceste bataille qui fut entre le neuf chastel et oatebourg en lan de grace mille Trois Cens quatre Vingt et huit le disneufuiesme iour daoust furent p'ns de la partie des anglois mille et quarante hommes que vngs que autres/et mors sur la place que en la chace de viii. cens. xl. et plus de mille nautrez et blecez. Et des escocops il en y eut environ cent de mors et p'ns de dix cens en la chace. Ainsi que les anglops supoient ilz se recueilloient. En quant ilz deoient leur plus besuils se retournoient et combattoient a ceulx qui les supuoient. Et telle maniere furent ilz p'ns en chace et non autrement. Or regardez si ce fut vne dure besongne et bien combatue quant en y eut de mors tant et p'ns d'ilg coste et d'autre.

Comment les escocops se departirent de oatebourg/ et menèrent le conte iames de d'glas mort et fut enseueyl en la baye de nymape. Et comme messire Archambault de donglas et ses compaignons se partirent de deuant cartion en galles ou ilz estoient et sen retournerent en escoce.



Pres toutes ces choses faictes & ordonnees tout recueilli & le conte de donglas qui mort estoit mys en ung cercueil et charge sur ung char et messire robert bert & Symon de grandin aussi ilz s'ordonnerent de partir. Si se departirent et ordonnerent & emmenerent messire Henry de parcy et plus de quarante cheualiers d'angleterre. et prindrent le chemin de l'abbaye de nymape sur la cande. A leur departement ilz bouterent le feu en leurs logis et cheminerent ce iour et se logerent encores en angleterre nul ne leur denpoit. Le lendemain ilz se deslogerent bien matin & vindrent ce iour a nymape. C'est une abbaye de moines noirs sciant sur le departement des deux royaumes. La se arressterent ilz & firent au monastier mettre et ensepeler le conte de donglas nomme iames. Et le second iour quilz furent la venus ilz sup firent faire son obsequie bien et reueramment / et fut sur le corps mise une tumba de Pierre et la banniere de donglas par dessus. De ce conte nen pa plus dicu en apt l'ame ne le ne scay a qui la terre de donglas est retournee. Car quant ie acteur de ceste hystoire fus en escocce et en son chastel d'auquest vint le conte Guillaume ilz n'estoient que deux enfans filz & fille / mais encores y auoit assez de ceulx de Donglas / car ien y eust iusques a cinq beaus freres tous escuyers qui portoyent le surnom de Donglas en l'hostel du roy d'auis d'escocce / & auoient este enfans a ung cheualier d'escocce qui s'appelloit messire iames de donglas Et les armes qui sont dor a trois oreilles de guerres leur retournerent / mais de l'heritage ne scay ie. Et desuey scauoir que messire Archambault de donglas dont iay traicte en plusieurs lieux come d'un cheualier qui fut et reboute des anglois estoit bastard. Quant ilz eurent fait a nymape l'abbaye ce po quoy ilz estoient la venus arresstez ilz se departirent les ung des autres et prindrent

congie ensemble et chascun sen retourna en sa contree / et ceulx qui prisonniers auoient les recreoient ou emmenoient ou ranconnoient Et vous dy que en ce party d'armes les anglois trouuerent les escotz moult courtois et debonnairez en leurs desirances et rancon tant quilz sen contenterent ainsi qu'on me dist ou pays de berne en l'ostel du conte de foie Jehan de chasteau neuf qui prins y auoit este dessous la banniere du conte de la mare & de dombarre & mesmes se l'ouoit du conte son maistre moult grandement / car il l'auoit laisse passer comme il auoit voulu.



Ensi se departirent ces gens d'armes et finirent les anglois et ranconnerent au plus tost quilz purent & au plus court y semer & retournerent petit a petit en leurs lieux. Et me fut dit et le crop assez que les escotz eurent bien dedens cens mille francs de rancons des prisonniers / ne depays la bataille qui fut deuant le chastel destrennes en escocce Robert de bris et messire guillaume de Donglas / messire Robert de bertcy / messire Symon fresiel / et les escotz furent sur les anglois et la chaste d'ara trop iours ilz neurent nulle iournee de prouffit ne de victoire si grande comme ceste. Quant les nouvelles vindrent en galles dont en la cite de carpon ou messire archambault de donglas / le cote de sui / le cote de suriat / et la gret gneur partie des escotz se tenoient et ilz furent iustement informez de la verite comment la besongne de otebourch cestoit poee & le grant conquest que leurs gens auoient en et fait sur les anglois si en furent grandement resiouys et courtoizez aussi de ce quilz ny auoient este et eurent conseil deulx desloger et eulx retraire en leur pays puis que leurs gens estoient retraiz. Si se deslogerent de deuant carpon et se myrent au retour et rentrent en escocce. Nous nous souffrons a parler des escotz et des anglois pou

Reports of Meetings for the Year 1961.

At the end of another successful year the Secretary wishes to thank the members of the Club, and the Council for all the help and encouragement that they have given to him during a rather difficult year. Their kindness, thoughtfulness, and patience have been much appreciated.

The Club congratulates Mr. Long on his distinction in receiving the Royal Society's medal for his valuable contribution to natural science. Each one of us feels justly proud, and wish him many further successes.

The membership is slightly below the average, although the numbers attending the meetings have increased. It is hoped that members will introduce more of their friends to the benefits of the Club.

1. The first meeting of the year took place, not at Inveresk as planned, but at Winton Castle and Pencaitland Church. Neither of these places had been visited. Accounts of these places will appear in the History. The historic castle was open by permission of Sir David J. W. Ogilvy, Bart. At the Church an Address was given by the minister the Rev. G. G. Morgan.

2. The June meeting was held at Bellingham and Hesleyside. Once again we were favoured with glorious weather. On arrival the members assembled in the church and were addressed by the Vicar. Later members drove to the Queen Anne House of Hesleyside the home of Colonel and Mrs. Charlton. This house with a long Jacobean tradition has a long history colourfully told by Colonel Charlton. Later members saw the house, and visited the forest and garden.

3. In July a Roman Day was held, the Club visiting the large camp at Chesters. Under the excellent guidance of the custodian members were shown over the camp and buildings. Later the remains of the Roman Bridge were seen. After tea at Chollorford the ancient remains of Corstopitum were visited and again described by the custodian.

4. In August a large number gathered at Hermitage Castle and were addressed by Miss R. Donaldson-Hudson, B.A., F.R.Hist.S., who later spoke at Old Castleton. On the return journey Lariston, the ancient home of the Eliot family, was visited. Miss Simpson recited portions of Border ballads, which were much enjoyed. Tea was taken at Wolflee Hotel.

5. The September Meeting was held at Greenknowe Tower where Miss Lyal addressed the members and at Lauder where the Club was welcomed by the Provost, J. Scott, Esq. The Town Hall with its relics was seen, and a visit was made to the Parish Church with its Chinese Chippendale pulpit. In the afternoon members drove to Thirlstane Castle and were received by the Hon. Miss Maitland. The state rooms had been thrown open, and the visit was enjoyed by everyone. After tea a newly discovered Roman Marching Camp two miles to the south-west of the town was visited.

Owing to unforeseen circumstances the Secretary was unable to attend the Annual General Meeting, and his place was taken by Major J. D. Dixon-Johnson, T.D., J.P., F.S.A. The reports of which appear.

Mrs. Miller, F.S.A.Scot., on her retiring as librarian and on leaving the district, was presented with a water colour painting of Berwick. Major Dixon-Johnson kindly offered his services as librarian until such time as arrangements could be made for the future of the library.

Accounts of visits to the places mentioned appear, or will appear in the History.

Treasurer's Report, 1961.

I have pleasure in submitting the Financial Statement for the year ending 20th September, 1961.

I have to report a surplus on the season of £4 17s. 1d. This is really not quite as bad as it sounds as there was some exceptional expenditure amounting to just over £47 during

1961, viz. : Purchase of a set of B.N.C. Histories £10 10s. 0d., Presentation to Mr. A. A. Buist £15 2s. 6d., Supply of B.N.C. Badges £21 12s. 0d.

The Income from subscriptions, entrance fees etc., for the year amounted to £457 10s. 9d. ; Expenditure for the year was £452 13s. 8d. ; showing a surplus of £4 17s. 1d.

The Credit Balance on the General Account at the commencement of the season was £101 14s. 6d., plus a surplus of Income over Expenditure for 1961 of £4 17s. 1d., giving a Credit Balance on General Account at the end of the season of £106 11s. 7d.

The Club's Reserve Account with the Trustee Savings Bank amounts to £195 19s. 11d.

The Balance Sheet shows cash in National Commercial Bank as £106 11s. 7d. and in the Trustee Savings Bank £195 19s. 11d., making a total of £302 11s. 6d.

Flodden Field Memorial Fund as brought forward from 1960 amounts to £48 2s. 7d. plus Interest of 1s. 6d., making the total cash in bank £49 8s. 7d.

The Club accounts have been audited by Mr. P. G. Geggie of the National Commercial Bank and I would take this opportunity of thanking him.

WINTON CASTLE.

(The Residence of Sir David J. W. Ogilvy, Bart.)

Winton House, later known as Winton Castle, is one of the finest examples of Scottish architecture under the inspiration of the Renaissance.

The original 15th-century house, burnt by the English, was rebuilt by George Seton, third Earl of Winton. The uniting of the two kingdoms under King James is therefore joyfully recorded in the stone carvings and the plasterwork.

King Charles I stayed with Lord Winton in 1633 before and after his coronation at Holyrood.

The lovely drawing-room and King Charles's room with their perfect plaster ceilings, fine pictures and furniture are unsurpassed in Scotland. The great carved stone chimneys and north front are worth climbing the tower to look at more closely. Even the modern additions have a character of their own for some tastes.

The beautiful trees and lawns and the terraced gardens give the house a rare setting of peace and beauty.

Octagon Hall was a courtyard, with two entrances to the house on the floor below, windows looking into it on every floor, and two Coats of Arms in the centre, with beautiful carving round the upper Royal one, and fine carved entablatures over the upper two rows of windows, now visible only from the roof.

Smoking Room entered through what used to be a window. All the windows were glazed in the upper half only (Groove still visible in the stone), with shutters below. Many were of stained glass (Coats of Arms).

Library or King's Room. Ceiling: Royal Arms in the centre. Motto—"Unionu Unio." "C.R." for Carolus Rex. Thistle, Rose, Fleur-de-Lis, Irish Harp, Prince of Wales' 3 Feathers. Tudor portcullis, Honours of Scotland with Latin motto (handed down to us unconquered, by 106 ancestors). Windows enlarged in all these rooms using stones from part of house that was pulled down. Cf. King's room at Pinkie.

Drawing Room (Great Hall). Ceiling: Model for Sir Walter Scott's "Bride of Lammermoor" (Ravenswood). Royal Arms over fireplace, Seton Arms in ceiling. Carpet made in India to Lady Ruthven's design, lost in Mutiny of 1857, found after 11 years. Walls as of original 15th Century House: alcoves have sides and arch of dressed stone behind the lath and plaster.

PENCAITLAND CHURCH.

By Rev. G. G. MORGAN, M.A.

Pencaitland Church is very old. The lower parts of the outer walls date from the 12th century. The Winton aisle dates from the 13th century.

In the 12th century the church was gifted by Everard of Pencaitland to the monks of Kelso, and in the 14th century by Sir John Maxwell of Pencaitland to the monks of Dryburgh.

Until the middle of last century there stood in the vicinity of the church a very old building called The College, which was the residence of the vicar and his chaplain, and was also used as a place of instruction for monks.

The church has been successively Roman Catholic, Presbyterian, Episcopalian, and Presbyterian.

The architecture is Norman, and there are some interesting Baroque tombstones in the churchyard. The pulpit, some of the pews, the pointed windows on the South side, the tower, the bell and the two watchhouses are 17th century.

The chancel was at the East end of the church and the door through which the priest entered, although now filled in, can still be seen.

There used to be a Laird's Gallery in the Winton Aisle, but it was removed in the latter half of the 19th century.

The remains of the "jouis" can still be seen at the foot of the gallery stairs.

PILMUIR, HADDINGTON, EAST LoTHIAN.

By Lady FRAZER TYTLER.

Pilmuir House was built in 1624 by William Cairns soon after his marriage with Agnes Broun. As it stands to-day it is very little altered. Looking at the house from the south side, the flight of steps leading up to the hall door was added in the eighteenth century, the door was put in the place where a window had been. Looking at the house from the north side there is to the east of the main door a two storey nineteenth century addition with pent roof. A twentieth century annexe runs from the west side of the house, but is only visible from the north side.

Pilmuir lies in the parish of Bolton. During the five hundred years between the time when William the Lion granted the Barony of Bolton to one William de Vetere ponte to the time when John Earl of Lauderdale received back the barony after forfeiture during the Commonwealth it appears from the Register of Sasines that the Barony changed hands, was divided and sub-divided, parts being held by such well known families the Douglas, Humes, Ruthvens, Maitlands, by the Abbey of Haddington and lesser folk.

References to Pilmuir show that one of the de Vetere ponte family, had gifted to the Abbey of Haddington "2 oxgangs of land and 7 acres in the territory of Pilmuir next Begbie*"; that in 1459 James II granted to John Dalrimple, burgess of Edinburgh one third of the Mains of Bolton with One third of the lands of Pilmuir; that in 1535 James V granted to George Earl of Hume and his wife in life rent and to their son Alexander in fee one third of various properties including the Barony of Bolton, and that in 1564 the then Earl of Hume sold the one third of the barony including Pilmuir to Secretary Maitland of Lethington. By 1608 Secretary Maitland's son James acquired the whole of the Barony and in 1613 he conveyed the Barony including Pilmuir to his cousin Lord Thirlestane, who in 1621 as Earl of Lauderdale conveyed the lands of Pilmuir to William Cairns and his wife Agnes Broun.

It appears, therefore, that a property of some sort known as Pilmuir has existed since the fourteenth century. Whether

there was a house on the lands in the early centuries is not known. When William Cairns and Agnes Broun were granted possession of Pilmuir the witnesses of "the handing over of earth and stone of the ground of the said lands" were "James Knox residing in Bolton, John Brown there and John Gothray there and William Patterson residing in Pilmuir all servitors of the said William Cairns."

The last owner of Pilmuir, Sir Henry Wade, assumed on the evidence above that there had been a house on the present site, and taking into consideration that part of Pilmuir lands had at one time been under the Abbey of Haddington, and because there were bee boles in the walls, that it was church property. This view is not, however, held by representatives from the Ancient Monuments Commission who, after going round house, walls surrounding the garden and dovecot said that in their opinion there is no evidence in the house itself of any building prior to 1624; that the walls could be either seventeenth or eighteenth century and that the bee boles were probably built into the wall at the time it was being built; that the dovecot was probably seventeenth century. In short they said that unless documents proved otherwise the existing structures pointed to house, wall and dovecot all being built as one operation.

William Cairns who built the house was according to the history of the Cairns family 56 when he took over the lands of Pilmuir. Judging by the life span of his son Richard, William probably obtained the property when he married. He died in 1653 and is buried in Bolton Church.

His son, Richard, succeeded him, married in 1641 Janet Denistoun, but had no children. He, therefore, left his property to his sister's male heirs and not to his brother who seems to have been one of life's failures. This led to trouble. Richard died in 1685, to be succeeded at Pilmuir by his nephew William Borthwick, but as he lay dying his brother William the ne'er-do-well, his widow and his son-in-law, raided his deed boxes and took away important papers. Legal proceedings were taken by the heir and new owner of Pilmuir and all seems to have been settled to his satisfaction. This William Borthwick had been apprenticed for five years to James Borthwick of Stow, Surgeon and Burgess of

Edinburgh. A copy of the Indenture between James Borthwick and himself can be seen in the dining room. He became in due course Surgeon-Major of the Forces in Scotland, President of the Royal College of Surgeons and a member of the Town Council of Edinburgh.

His son, Henry who succeeded to the property in 1690 was mortally wounded at the Battle of Ramillies and died on the 27th May 1706. He had two sons, but they were only children and his widow sold Pilmuir to his second cousin William Borthwick of Fallahill.

In 1711 William Borthwick of Fallahill disposed the property to Lieut.-Colonel John Murray, younger son of Sir James Murray of Philiphaugh, and the property remained in the hands of the Murray family until 1744 when it was bought by William Watson, W.S. He was succeeded by his nephew in 1759, and during the next twenty-five years the property seems to have changed hands four times, tenants living there for some of the time. In 1785 Major Peter Grant who had recently retired from the East India service bought the property. He died shortly afterwards, leaving the property to his three daughters, Catherine, Margaret and Jean. The elder daughter sold her one third share to Lord Sinclair, and Pilmuir, as in mediaeval times was divided once more into thirds. There was confusion about boundaries and a prolonged Court action. However, in 1840 William Baird of Blantyre and Lennoxlove acquired the two thirds left with the two younger daughters. It passed to Robert Bruce Baird the following year, and he in 1877 acquired Kirklands. Thus two thirds of Pilmuir as acquired by William Cairns in 1624 together with Kirklands became one property which remained in the hands of the Baird family until bought by Sir Henry Wade in 1925. Sir Henry died in 1955, leaving Pilmuir in the hands of Trustees.

It is interesting to speculate as to which of the owners embellished Pilmuir in the eighteenth century. Sometime in that century—probably in the middle years according to the representatives of the Ancient Monuments Commission—the main rooms were panelled, fireplaces remodelled and the west bedroom given a bed recess and powder closets with

elaborate carving. William Watson, W.S., owned the property during the middle years of the century. In the register compiled by the Society of Writers to the Signet he is described as William Watson of Pilmuir. One is tempted to imagine an Edinburgh lawyer with the wish and money to become a country gentleman preparing for himself a suitable background and undertaking all the embellishments !

* It is interesting that the land lying next to Begbie is known as Kirklands.

BELLINGHAM.

By Rev. B. GARMAN.

St. Cuthbert's Church

There has been a church on this site since 7th or 8th century. The oldest part of the present building is the East end which dates from the 12th century, but the roof of the chancel dates from 1850.

As a result of a series of raids at the end of the 16th century the church was burned and badly damaged. This church had a nave with aisles, but in the early 17th century the aisles were demolished and the walls brought into the line of the arcades. The pillars of the arcade were built into the walls. The S. transept also had a W. aisle until the 17th century rebuilding. It is thought that three wandering masons were employed on the building of the walls which appear to have been built in a hurry as the work does not match in quality that of the 12th century.

The vaults of the nave and transept were erected at this time. They are stone vaults carried by narrowly set arches, fifteen in the nave and seven in the transept. The arches of the nave roof are not all centred properly. The N. wall sank soon after the building was completed and as a result the tops of the arches are now 4 inches lower. Buttresses were built in the 18th century to strengthen the wall but were not effective as supports.

A scheme estimated to cost £8,500 is in progress to restore the church. The arches will be hydraulically jacked up and restored to position.

The masons of 1610 used methods of 100 years earlier therefore they may have served their apprenticeship in an area cut off from the newer methods.

The chantry chapel of the de Bellinghams was situated in the S. transept. It was known as St. Catherine's chapel.

The piscina remains in position.

The parish was carved out of Simonburn in 1818, of which this was a Chapel of Ease. The patronage of the living was given to Greenwich Hospital which used the living for ex-naval chaplains. The patronage is now in the hands of the bishop of the diocese.

Town

There was a hamlet here before the monks of Lindisfarne stayed here for some time when carrying the bones of St. Cuthbert. The site of the castle of the de Bellinghams was opposite the Railway Station.

Coal and iron were mined in the neighbourhood. The slag heaps are referred to as 'blue heaps.' A foundry existed from 1830 onwards and produced iron on which the reputation of Vickers Armstrong rests to this day. The iron contained carbon which strengthened the metal and it was used for the manufacture of cannons. The ingots of iron were circular and were carried by horse and cart into Hexham. Many ingots were thrown out on the way to allow the horses to pull their loads up steep parts of the road. The railway was late in coming to Bellingham and this lack of transport killed the iron foundry. The inhabitants now rely mainly on forestry for employment although there is some coal mining in the area.

The Long Packman

The incident took place in 1720. The owner of Lee Hall who had made a fortune in the East India Company was known to possess a gold plated dinner service worth £1,000. One day a pedlar knocked at the door. He was a pedlar of cloth and carried a long pack, 5 feet 6 inches in length, on his back. When told that the master of the house was in London he asked, "Can I leave my pack?" He left the pack in the house. A gamekeeper came in, saw that the pack moved and shot it at once. When the pack was opened they discovered a man shot dead. Beside him were a horn and a pair of scissors. The scissors were to be used to cut his way out of the pack and the horn was to be a signal to his confederates

hidden outside. The servants armed themselves, blew the horn, and when the place was attacked they shot several of the attackers but the bodies were removed before morning. The man in the pack was never identified. It was assumed that the attack was the work of neighbours.

In the 18th century there was a dispute over landmarks, and a man was shot as the result. Before 1845 there was practically no government, and the man who did the shooting is said to have claimed benefit of clergy. The relations of the man who was shot buried him at the end of the pew of the man who shot him. The gravestone is there to this day.

St. Cuthbert's Well

The well never runs dry. There are many legends of miraculous healing attached to the well.

CHESTERS, 1961.

By R. H. WALTON.

The Club's visit to Chesters on July 19th coincided with one of those days when the weather seems to threaten disaster from hour to hour but never quite comes to the point where we have to dash for shelter. In fact, the day was hot and still with plenty of sun, ideal weather for this visit to what must be one of the most attractive Roman sites in the north of England.

Cilurnum, to give it its Roman name, was purchased by the famous nineteenth century family of antiquarians, the Claytons, who built their home there, excavated part of the fort itself and laid out the whole as a park. The effect is ideal from the scenic point of view, the excavations being isolated from one another relieved the scene from that somewhat cluttered appearance which we see all too often elsewhere.

There is an excellent small museum devoted to the finds from the excavations and the river, which runs down the east side of the park, separates us from the unique bridgehead which lies on the other bank and which was discovered in 1860 by Mr. William Coulson of Corbridge and excavated by John Clayton.

The fort itself, being one of the few on the Wall which was sited in congenial surroundings, was almost certainly a centre of local government. It is somewhat peculiar in construction in having six gateways, the only other fort on the wall similarly designed being Amboglanna where the Maiden Way leads out northward from the Wall. Cilurnum is famous, also, for the discovery of one of the only two known examples of a "diploma," the copper plate on which was inscribed the details of the grant of Roman citizenship to a soldier on his retirement from the service. So much is to be seen on the ground and in the museum that it would be an endless task to describe everything.

It might be worth while to recall the existence on the hilltop to the east of the station of the very quarry at Black Pastures from which came much of the stone used to build the Wall, the fort and bridge.

The famous bridgehead, which must be approached by means of a fenced path on the east bank of the North Tyne, is of exceptional interest and is a "must" on any visit to Chesters. Not only is the stone-work in very good condition, but there are several puzzling features to be seen. One, the lightly built structure thought to be some kind of defensive building and the totally un-roman "covered-way," "aqueduct" or whatever else it may be which cuts through the main works. Lastly, there is a somewhat notorious relief-carving on one of the lower stones of the abutment, executed while the stone was in the quarry. The only light which I, personally, can cast upon the subject, though dim, may be of interest. The symbol depicted is identical with the Samian potter's mark of one Cumbo or Cambo whose products have been found in Eastern Gaul. Similar carvings are said to exist elsewhere along the Wall.

Corstopitum

This famous site, of which about one third was uncovered before the First War, represents a civil rather than a military establishment adjacent to another great bridge over the Tyne and on the main north and south highway of Dere Street.

Here, one may browse for hours at a time without exhausting its possibilities, though one may be in danger of exhausting oneself. The Ministry of Works maintains another excellent museum there, where all the latest developments may be studied.

On the occasion of the Club's visit, it was unfortunate that so little of the day remained and that the weather happened to be at that time more threatening than usual. It is hoped that these conditions did not prevent our members from enjoying their visit.

Note of wild flowers and plants on Hadrian's Wall near Walltown House and Chesters, by Miss M. Carr.

In the crevices of the whin rock near Walltown, chives grow abundantly, of which Camden, the Elizabethan antiquarian says in "Britannia" :—

"The fabulous tales of the common people concerning this wall, I doe wittingly and willingly overpass. Yet this one thing, which I was enformed of by men of good credit, I will not conceal from the reader. There continueth a settled persuasion among a great part of the people thereabout, and the same received by tradition, that the Roman souldiers of the marches did plant here, every where in old time for their use, certain medicinable hearbs, for to cure wounds: whence it is that some Emperick practitioners of chirurgery in Scotland flock hither every yeere in the beginning of the summer, to gather such simples and Wound Herbes; the virtue thereof they highly commend as found of long experience, and to be of singular efficacy."

These also are reported growing near, as well as edible Roman snails :—

Helix pomatia.

Yellow Fumitory.—*Corydalis lutea* (L) DC.

Shining-leaved Crane's bill.—*Geranium lucidum* L.

The rare rock plant Fairy Foxglove.—*Erinus alpinus*.

Chives.—*Allium schoenoprasum* L.

HERMITAGE CASTLE AND UPPER LIDDESDALE.

By Miss DONALDSON-HUDSON, B.A., F.R.Hist.S.

Hermitage Castle

So much has already been written about this renowned and redoubtable Border stronghold that any further detailed account of it would be redundant. Moreover there is an excellent official guide book issued by H.M. Ministry of Works.

Sufficient to say that the oldest extant part of the castle can be dated to the time of the English occupation by the Dacres, 1358-1365. (The widow of Sir William Douglas, Knight of Liddesdale, after his murder by his kinsman the first Earl of Douglas, had married one of the Dacres from Cumberland, who claimed the Manor of Hermitage by right of his wife). The plan of this original building is that of an English fortified manor house ; the entrance door on the south side leads into a small courtyard, to the right and left of which are two lateral rooms with windows looking into the courtyard, while in the north wall is the spiral staircase leading to the upper floors. The masonry, consisting of large, square-cut and well-jointed blocks of reddish ashlar, is reminiscent of the work of the famous English master-mason of that epoch, one John Lewyn, who is known to have done much building at Coldingham Priory (1364) and at Roxburgh Castle (1378). Some very fine mason's marks are to be seen on the door jambs of the east lateral room and also inside the staircase.

The Castle gradually assumed its present form—a more typical Scottish keep with four corner towers, the greyish-brown rubble work of its walls contrasting strongly with the dressed ashlar of the earlier building—after it had been restored to the Douglasses who held it from 1371 to 1491, after which it passed to the Hepburns, Earls of Bothwell.



PILMUIR, EAST LOTHIAN.

ROMAN BRIDGE AT CHOLLERFORD.



4. Bridge-head showing abutment.



B. Bridge-head showing wall approach and square building.

An interesting, if not unique feature of this later (15th century) building, was the external wooden rampart or gallery, which ran a few courses below the top storey windows. It was carried on timber baulks let into a series of putlock holes, below each of which was a supporting stone corbel. On the east and west sides of the castle the gap between each pair of towers was bridged by a high pointed arch, thus enabling the builders to carry the gallery through in a straight line. This is the whole *raison d'être* for the great archways, which were never designed for entrances, as might appear at first sight.

Of all the tales of murder and other dark deeds connected with Hermitage, perhaps the best-known legend is that of Sir William de Soulis' supposed death by being burnt alive in a cauldron on the Nine Stane Rig, and Miss Simpson gave us a dramatic reading from John Leyden's ballad, in which all the gruesome details are vividly described.

*Liddell Castle**

This is a comparatively unknown site, about a mile and a half north of the confluence of the Liddell and Hermitage Water, and today there is nothing to be seen but a grass-covered mound and the lines of the ancient ramparts and ditches. Yet this was once a powerful bastion in the line of defence against the Scots. According to Bruce Armstrong, author of the "History of Liddesdale," it was one of the first of the stone castles built by the Norman barons for the defence of the Border. It occupies a commanding position on a high precipitous bluff above a bend in the River Liddell, which forms a natural barrier on the west and south-west sides; the north flank is protected by a deep gully, while on the east and south-east it was guarded by a triple line of moats and ramparts. The entrance appears to have been at the north-east corner. In the middle of the inner enclosure a depression in the ground marks the site of the castle well.

The first recorded Lord of Liddesdale was Ranulph de Soulis, a Northamptonshire baron, who is believed to have built the castle at the end of the 11th century. By the early 13th century, however, the Soulis, who in the meantime had

acquired Hermitage, seem to have more or less given up their castle on the Liddell, for in 1217 and again in 1220 the Sheriff of Cumberland was ordered to take possession of Liddell Castle and to guard it. From this and later records it is plain that Liddesdale was regarded as English territory. James Logan Mack, in his book "The Border Line," states his belief that up to the second half of the 16th century the Liddell formed the actual frontier ; it was not until 1583 that the line of the Border was moved southwards and eastwards to the Kershopeburn, from its confluence with the lower Liddell below Newcastleton, up to the source of the burn in the boggy ground of Hobbs Flow and thence by Bloody Bush into the Cheviots. In any case it is fairly certain that in Plantagenet times all this part of the Border country, along the Liddell and the Hermitage Water, must have changed hands frequently between the English and the Scots.

To return to Liddell Castle, a record of 1281 shows that it was already falling into decay at that period : "Lydel the site two solars, a chapel, a kitchen, a byre, a grange and a wooden granary, which threaten ruin." For all its strength and strategic importance its days were already numbered and after less than 200 years.

In 1319 John le Mareschal and John de Prendergest, who had deserted from the English side and allied themselves with the Scots, held Liddell Castle. But before 1328 it had become the property of the Wakes of Liddell, who supported the English, for in that year Edward III commanded the Sheriff of York to restore the castle to them.

David II was taking no chances with the Wakes, who could threaten his rear, and just before his invasion of England in 1346, a campaign which ended so disastrously with his defeat at Neville's Cross, he captured and destroyed the "Castle of Lidallis on the Marches."

A "Valuation" made at Carlisle in 1349 records that "Thomas Wake of Lydell was seised in fee at his death of the Castle and Manor of Lydell in Cumberland It is worth £70 16s. 2d. whereof the site of the Castle Manor destroyed is worth 6d."

And with this entry Liddell Castle passes out of history.

At the end of the 18th century, Rev. James Arkle, Minister of Castleton 1792-1801, wrote that the foundations and a portion of the wall were still to be seen ; and in 1839 the fosse and ramparts were still entire, according to the New Statistical Record for Roxburghshire. But now we can only cry "Ichabod !"—the glory is departed.

* Not to be confused with Liddell Mote, *alias* Liddell Strength, about 12 miles to the south-west, above the confluence of the Liddell and Border Esk, between Penton and Netherby.

Castleton

On the opposite side of the road from Liddell Castle lies a buried village, only to be recognised now by the turf-covered ridges which are the remains of the walls of the houses and other buildings that once constituted Castleton. In the middle of this desolation the old Mercat Cross still stands. In 1926, when James Logan Mack published his great work "The Border Line," only the base of the cross was to be seen ; but subsequently the shaft of the cross was discovered lying in a near-by hollow and re-erected.

Historical records of Castleton are very scanty, but it is known that Edward I spent a night there on his way south from Roxburgh Castle.

In 1672 the Duke and Duchess of Buccleuch and Monmouth petitioned Parliament for powers to hold three fairs a year, on June 18th, September 4th and October 10th, together with a weekly mercat on Fridays "in the towne of Cassiltoune in the lordship and regality of Liddesdale and sheriffdom of Roxburgh." These fairs and mercats were "for the buying and selling of horses, nout, sheep, meal, malt and all sorts of merchandise and commodities necessary and useful for the country." Evidently Castleton was a fairly populous and thriving village at that date. Yet in less than a century, for reasons not disclosed, it had become almost depopulated and the dwellings were ruinous. In 1793, the then Duke of Buccleuch having offered a site two and a half miles down the valley, the present village of Newcastleton came into existence. Before that the place was called Copshaw from a farm of that name.

Liddesdale was the haunt of the Elliots, the Armstrongs and the Wakes. They were all hardened freebooters and these men of Liddesdale were accounted the most lawless of all the Border clans. They were constant thorns in the flesh of both the English and Scottish Wardens of the Marches. Even after the shift of the Border from the Liddell to the Kershopeburn, they were very well placed for their raids into England. It is only $3\frac{1}{2}$ miles south from Castleton to the Kershopeburn; while at the same distance to the east lies Hobbs Flow, that boggy, marshy tract where the head waters of the Kershopeburn originate. There are drove roads across the Border in both directions. One of these started just below Castleton (opposite the cemetery) and headed south into Cumberland.

Another starting from Dinlabyre (two miles up Liddesdale from Castleton) crossed into Northumberland by Bloody Bush, which is half a mile north of Hobbs Flow and where, according to tradition, a band of Northumbrians returning from a raid into Liddesdale were incautious enough to doss down for the night without posting sentries, with the result that the avenging Scots fell on them in the small hours and slaughtered them to a man. This bridge road used to be a busy thoroughfare in the early 19th century, being used extensively for the transport of coal by pack-horse from the North Tyne collieries. It ran from Lewisburn, midway between Plashetts and Kielder, and debouched just above Dinlabyre. The coal so carried supplied the Scottish Border towns such as Hawick and Jedburgh. (Some coal was carried to them also from Canonbie on donkeys). After the opening of the Waverley-Hawick railway in 1845, the Border towns could more easily obtain their coal from the Lothian collieries; and finally the Border Counties Line, opened in 1869 between Riccarton Junction and Hexham, gave the *coup de grace* to the old coal road.

An interesting feature of this old road is the Toll Bar, where it crosses the Border close by Bloody Bush. It is, from Mack's account, an impressive monument built of hard grey sandstone, six foot square at the base, tapering to three foot square at the top and standing fifteen foot high. In the north face is set an inscribed slab bearing the names of

the two landowners, one on either side of the march between Northumberland and Roxburghshire, and of their respective properties :

WILLOWBOG, the property of Sir J. E. Swinburn of Capheaton.

DINLABYRE, the property of William Oliver Rutherford, Esq.

(Oliver of Dinlabyre assumed the name of Rutherford in 1834, so the monument must be later than that year.)

Then follows a list of Toll Rates (the tolls I believe were levied nearer Lewisburn) :

1st For Horses employed in Leading Coals	2d. each
2nd All other Horses	3d. each
3rd Cattle	1d. each
4th Sheep, Calves, Swine	$\frac{1}{2}$ d. each

The above Tolls exacted once a day.

Distances from this Place Bloody Bush

Lewisburn Colliery	5 miles	Dinlabyre	3 $\frac{1}{2}$ miles
Bellingham	23 „	Castleton	7 $\frac{1}{2}$ „
Hexham	37 „	Hawick	21 „
		Jedburgh	25 „

Larriston

This old manor-house, first built in the mid-17th century, with minor additions made in Victorian times, is now sadly empty but still preserves a great deal of its former charm. Its claim to fame is two-fold ; it shares with Redheugh (just north of Newcastleton) the honour of being the cradle of the Elliots, and Bonnie Prince Charlie, in 1745, spent a night here on his march into England.

As regards the latter episode, I will quote from John Byers' " Liddesdale " : On the south side of the Liddell stands the modern house of Larriston, but the topography of this locality has been completely altered Over and Nether Larriston and Haggiehaugh, as distinct and separate farms, have passed out of existence and are consolidated in one holding, and the

present mansion occupies roughly the site of the farm-house known as Haggiehaugh. It is commonly stated that Prince Charlie spent a night in Larriston . . . but this is scarcely correct. The new house of Larriston was then in course of construction, and the family was living in Haggiehaugh, and it was in this house where the Young Chevalier actually lodged. Mr. Oliver, the laird, in order to avoid contact with royalty, slipped over the hills to Willowbog, and left his wife to do the honours.

The four posts and other broken pieces of the bed in which the Prince is believed to have slept are however preserved in an attic room at Larriston.

To turn to the connection of the Elliots with Larriston, the first of the family to own it was William Elliot, mentioned in 1515-16 as "of Larriston and brother of Redheugh." He is believed to have been a son of Robert Elwold (as the name originally was) of Redheugh, who died in 1491.

In 1596 the Calendar of Border Papers reports that "Robert Elliot within these 12 years has erected another (tower) called Laristone." Evidently this new building was not approved of by the English, as being rather too near the Border.

The last laird of the Elliot line succeeded his father in 1712 and about this time the estate began to be broken up. In 1719, John Oliver, elder of Dinlabyre bought Over and Nether Larriston.

Nearly 70 years went by and on December 23rd 1786 Over and Nether Larriston and Blackhope were bought back by a Colonel William Elliot. He had been born in very humble circumstances and as a boy had worked on a farm, been apprenticed to a tailor at Teviothead, and had been employed as a stable lad by Sir Gilbert Elliot of Stobs who, knowing that the boy was the head of the clan, used to remark when mounting his horse "Better he who holds the stirrup than he who rides." William later took service in the East India Company, in which he rose to the rank of Major-General, and on his return from India he had the means to recover his ancestral home.

On his death in 1803 he was followed by George Scott

Elliot, known as "Pinfoot" on account of his lameness, an unworthy successor who let the estate slip through his fingers. So the reign of the Elliots came to an end, since when the estate has changed hands several times. It is now the property of Lord Whitburgh, who farms the land but has never resided there.

For all the details of the genealogy and later history of the Elliots of Larriston I am again indebted to John Byers' book.

" Lock the door Lariston, Lion of Liddesdale,
Lock the door Lariston, Lowther comes on,
The Armstrongs are flying,
The widows are crying,
The Castleton's burning and Oliver's gone."

So runs the old Ballad, which again we were fortunate to hear read by Miss Simpson.

Editorial Note :

Hermitage Castle was last visited by the Club in 1931.

Castleton, Liddell Castle and Larriston got a brief mention in an account of a tour of Upper Liddesdale in Vol. XII.

GREENKNOWE TOWER.

By Miss M. LYAL.

The most ancient proprietors of the Greenknowe estates of whom there is any record were the Gordon family, whose titles of Gordon and Huntly may still be recognised in the names of places, and who continue to hold the superiority over a considerable portion of the adjacent lands. The progenitor of the family is said to be a Norman knight who came to Scotland in the time of Malcolm Canmore, 1057, from whom he received grants of land in Berwickshire of which East and West Gordon form a part.

In the latter part of the 12th century we find a Recardus de Gordon, a man of considerable distinction in Scotland in the reigns of King Malcolm IV and King William the Lion. In 1165 he makes a donation to St. Mary's Church of Kelso and the Monks serving God there, and to the Church of St. Michael in his village of Gordon; a bounded piece of his lands and estates of Gordon lying adjacent to the Churchyard of Gordon in a free and perpetual alms and grants to whatever minister they shall place in the said Church of Gordon, all the ordinary privileges of pasturage, moss, muir and other conveniences enjoyed by the inhabitants of the lands of Gordon. He died about 1200 and was succeeded by his son, Sir Thomas de Gordon, who confirms his father's gifts. He was succeeded by his daughter Alicia de Gordon, who married her cousin Adam de Gordon, by which marriage the lordship of Gordon was united in one family. This Adam mortified to the Monastery of Dryburgh a bounded piece of land lying in the territory of Fawns. He was one of the Commanders sent by Alexander III to assist King Louis of France on an expedition to the Holy Land, and died in 1270 in Tunis. Sir Adam de Gordon, grandson of Alicia, was one of the greatest men of that age. He first paid homage to Edward I in 1296. Later

he changed his allegiance and supported Sir William Wallace and Robert the Bruce. He was keeper of the Castle of Wigton, and received the lands of Glenkins in Galloway. He obtained from Thomas Randolph, Earl of Moray, a grant of land and the barony of Stichel, which King Robert ratified and confirmed to him and his son, Sir William, by charter June, 1315. Sir Adam also received from the same Monarch a grant to him and his heirs of the Lordship of Strathbogie in Aberdeenshire, then in the crown by the forfeiture of David de Strathbogie, Earl of Athole. He had four sons, the eldest, Sir Alexander, his heir. To his second son, William, he gave the lands of Stichel in Roxburghshire, and Glenkins in Galloway, and from whom are descended the family of Kenmure. His son, Sir Alexander Gordon, now designed of Huntly, was killed at Durham in 1346 and his grandson, Sir John Gordon of Huntly was slain at Otterburn in 1388.

Sir Adam, son of Sir John, married Elizabeth, daughter of Sir William Keith, great Marishal of Scotland, by whom he had a daughter, Elizabeth. He was killed at the Homildon Hill in 1402. Elizabeth married Sir Alexander Seton, second son of Sir William of that ilk, 1408. He took the name of Gordon. He died between 1435 and 1437, and was succeeded by his son Alexander Seton, Lord Gordon, who married three times. By his first wife no family. His second wife was Giles, heiress of John Hay of Tullibodie in Clackmannanshire, and her son, Sir Alexander Seton, succeeded to his mother's estate, and became ancestor of Setons of Touch. His third wife was Elizabeth, daughter of William, Lord Crichton, Chancellor of Scotland, and her sons and daughters all took the name of Gordon. This Alexander, Lord Gordon, was created Earl of Huntly 1445. He died in 1470 at a great age, and was succeeded by his son George, second Earl of Huntly, who being wearied (so the tradition goes) of the unsettled state of affairs on the borders, made over to his brother, Sir Alexander Seton, the lands of West and East Gordon, Huntly, Fawside, Foggo, Mellerstanes, Rummelton, (or Rynalton) Hexpath, and Woolstruther, (Westruther) and thereafter resided in the North. The charter bears the date 1470, and is confirmed by James IV in 1472.

The Setons of Greenknowe, Sir Alexander, brother of George,

Earl of Huntly, was appointed heritable armour bearer and squire of the body to the King. There were various Seton owners who seem to have been people of position in the country, one married a daughter of Lord Home, and he died at Flodden. Sir James Seton succeeded in 1580, and it was he who built the tower. It is said that during that very unsettled period a party of English made a raid on Seton property and destroyed his house. The Laird and his lady were forced to flee and conceal themselves where they best could, and when the fray was over and the lady made herre-appearance, she replied in answer to a question of the Laird, that she found shelter "doon amang the rashes on the green knowe." This was a round knowe or small hill on the margin of the great moss of Gordon where the tower now stands. The Laird gallantly said if he lived he would find her a better shelter on that knowe than the "rashes," and in the year following, on his coming into possession of the estate he must have built the tower, as is shown by the date on it. The initials are J.S. and J.E.—James Seton and Jane Edmonstone, his wife. It must have been at first a place of some strength, being surrounded by marshes, and having a moat or deep ditch all round it, the remains of which are still seen. It was habitable up to the early years of the 19th century. Sir James's grandson, another Sir James, married in 1611 Barbara Cranston, of the family of Murray-town, now Morrieston. His father had granted him a charter of all his lands in Berwickshire, and this charter was confirmed in 1616 by George, Marquis of Huntly, and George, Earl of Enzie, his son. He was succeeded by his son, Sir James, a minor. His mother, Dame Barbara Cranston, had a life rent of a great part of it, and along with curators managed the affairs of her son. The lands of Nether Huntlywood were feud to Thomas Cranston, and the Estate of West Gordon with the Mansion place of Greenknowe was sold in 1637 to Robert Pringle, W.S., of Bartenbush, who had purchased Stichel from Sir John Gordon of Lochinvar, later Viscount Kenmure. He also purchased in 1638 Rummeltonlaw the £4 lands in West Gordon, and the charter lands of the Chapel of Huntly and Lowandals from James, 3rd Earl of Home, for the price of £19,000 Scots fixed by arbitration. Robert married Katherine Hamilton,

and died in 1649, and was succeeded at Greenknowe by his second son, Walter, born 1625, a noted Covenanter and writer, who spent several years in prison. He married in 1649 Janet Pringle of Torwoodlee, and died in 1667. His eldest son succeeded at the age of 16, and died in 1676. His second son, James, succeeded, and married Sophia Pringle of Torwoodlee, with a tocher of 100,000 marks. James was a Cameronian, and in 1680 he was indicted as a rebel for not joining the royal standard and army according to proclamation "to proceed against the rebels" at Bothwell Brig. He had to pay a fine of £1,500 Scots. He was again indicted with his brother-in-law, George Home of Bassendean, James Home, and Mr. John Veitch, minister of Westruther, for treasonable harbouring, ayding and abaiting, assisting, intercommanding, and conversing with, and doing favours to open and notorious rebels and traitors. James died in 1694, and was succeeded by his son George, aged 14, who went abroad and burdened the estate with much debt. On his death in 1724 his uncle, John Pringle, an Edinburgh wine merchant, succeeded, but he sold Greenknowe back to his sister-in-law, Sophia Pringle. At the same time he sold to his niece, Janet Pringle, Rummelton and Hexpath. On her mother's death Janet succeeded to Greenknowe, and on her death it reverted to a cousin, George Pringle of Torwoodlee. In 1785 it was sold to George Fairholm of Greenhill, Edinburgh.

Adam Fairholme, an Edinburgh burgess, first married Isabella Pringle, daughter of James Pringle of Greenknowe, second Sophia Pringle of Torwoodlee. His son George, who had made his money in trade with Holland, purchased Greenknowe in 1785. I think it would be his son, William, who brought an English wife to Greenknowe, but she did not like living in such a rude and inconvenient old house. The estate was held by members of the Fairholm family till 1859, when it was sold to James Dalrymple of Langlee at a price of £36,000. James Dalrymple died in 1878, and the property was held by his trustees until 1901, when it was conveyed by them to Arthur Dalrymple Forbes Gordon, his grandson, in life rent, and his heirs in feu on condition that the said heirs should take the name of Dalrymple. Arthur Dalrymple

Forbes Gordon died in 1931, and his son succeeded and assumed the name Arthur Ewan Forbes Dalrymple. He sold Greenknowe Farm to my brother, Thomas B. Lyal, 1952.

I have always understood that the site of the Gordon Castle was in the field on the West side of the Gordon-Lauder road, just North of Gordon station. The fields on the other side of the road are still called the castle parks. I have found in one book that there might have been a castle at the West end of the village on the brow of the hill facing West, as at one time some very strong foundations were discovered there. It is possible that there were two castles or forts. There is a footpath from the village, starting near the church and school, which my father always called a kirk and school road, and the path was always left untouched at the side of the field. This path was always used by the postman as long as he walked his round. There is a knoll at the side of the road beyond Greenknowe farm steading leading to the pond which my father called the bannock knowe, as he said it was where the monks from Kelso halted their ponies on their way to Lauder and the Lammermuirs to collect the wool. There is a field beyond the pond which runs alongside the main road on the left hand side. It is called the Windlestraw causeway. The field is in two parts, with a boggy part between. The theory is that in wet weather bundles of rushes, etc., were laid down so that the ponies might cross.

I have not been able to find out when Greenknowe became a tenant holding, but it may have been in 1817, as I have a note of a sale of stock at Greenknowe at that date. That may have been when Mr. George Bruce of Slagarie or his father became tenant. I know that it was in his time that the farm was moved to its present site. The house bears the date 1837, and I understand that wood from the tower and other buildings was used in its construction.

I have a chair in Edinburgh which was given to us over 40 years ago by two sisters, and we were told it had been used in the tower. I think their father, who was shepherd with Mr. Bruce, may have been born in the tower in 1805. I know they lived in a house which is now part of the farm buildings.

Mr. G. Bruce died in 1861, and my grandfather, Robert Lyal, came from Whitslaid in 1862, and farmed till 1883, when my father, Alexander Lyal, took over and farmed till 1921.

GREENKNOWE TOWER.

Description

The tower stands upon a low grassy knoll originally defended by marshy ground on all sides. Immediately to the west of it there is a considerable extent of level ground which possibly marks the site of a garden, while rows of stately trees seem to indicate the line of an avenue which has approached the castle from the north.

The building is L-shaped on plan, the larger wing measuring some 24 ft. x 15 ft. within walls averaging 4 ft. in thickness, while the shorter wing is 15 ft. in width with a projection of 10 ft. eastwards. The entrance doorway with its fine iron yett is in the usual position in the re-entering angle. The carved lintel over the doorway has a projecting hood-moulding wrought on the upper edge and sides. Carved in relief on a central raised panel is the date 1581 flanked by two shields between the letters I.S. and I.E. for James Seton and Jane Edmonstone his wife.

The entrance doorway gives direct access to the stair foot, whence a doorway in the main east wall leads down three steps to the vaulted kitchen, which has an arched fireplace formed in the north wall 8 ft. 6 in. wide by 5 ft. deep. There is a small wall-recess at the back of the west ingo and also an aumbry in the main north wall. The three remaining sides of this apartment are lighted by small loophole windows, the one in the east wall being placed so as to command the entrance.

The great hall on the first floor is gained by means of a spacious wheel stair with steps 4 ft. 6 in. in width, whence the usual turret staircase corbelled out over the re-entering angle, has communicated with three upper floors, giving access to rooms over both the hall and staircase wings. It has been well lighted by windows on three sides. The hall

fireplace, formed in the east wall, is decorated with ornate side pilasters, with moulded caps and bases set some 6 in. apart and having a projection of about 6 in. from the wall-face, supporting a stone lintel 9 in. in length and 1 ft. 10 in. in depth over which there is a straight saving-arch. The kitchen chimney flue has been carried up the centre of the north gable, on each side of which there has been originally a small recess or closet lighted from the exterior. Within recent times one bridge of the flue has been partially destroyed in order to enlarge the west recess. Formerly the access to this closet appears to have been by a recessed doorway at the west angle, which has been subsequently built up. The north gable has been thickened on the interior in order to facilitate the construction of the fireplaces above. The gables are all finished with crow-steps in the usual way, and there are three circular angle-turrets springing from corbels at the third floor level.

History

The Seton family acquired the property by marriage with the heiress of Gordon of that ilk about the beginning of the 15th century, and the tower appears to have been built by James Seton of Touch in 1581, the date on the lintel over the doorway. In the 17th century it passed by purchase from the Setons of Touch to the Pringles of Stichel, and was occupied by Walter Pringle, a noted covenanter and an author. (Based on the Royal Commission Inventory of Ancient Monuments in Berwickshire).

GREENKNOWE ESTATE IN 1859.

ALL and **WHOLE** the lands of West Gordon with the Tower fortalice and Manor Place called Greenknowe, dovecot thereof, orchards, houses, biggings and other several pertinents, **ALL** and **WHOLE** the Mill of Gordon milnlands, multures and pertinents thereof lying within the Lordship of Gordon late Regality of Huntly and Sherifffdom of Berwick, **ALL** and **WHOLE** the lands of Over and Nether Huntly Woods and **ALL** and **WHOLE** the five husband lands of West Gordon and town thereof with the houses, biggings and pertinents

of said whole Lands, ALL and WHOLE these four pound lands in West Gordon some time said and disposed in feu farm by the Commendator of Kelso and Convent thereof with consent of King James V to Mr. David Borthwick, and afterwards disposed by him to Alexander sometime Lord Hume (sic) with ALL and SUNDRY houses, biggings, yards, outsets, insets, tofts, crofts, meadows, mosses, muirs, dependances, common pasturages, multures and other mill dues, easements, privileges, parts, pendicles and pertinents of the same whatsoever used and wont belonging to the said four pound lands comprehending specially therein that part of the said lands of Luckencroft lying in the town and territory of West Gordon and Shire of Berwick as also ALL and WHOLE the lands called Chaunter lands of the Chapel of Huntly, and ALL and WHOLE that part and portion of the lands of East Gordon called Lowinsdale, all to be known in future as the estate of Greenknowe, but excepting certain lands attached to the Glebe of Gordon and also excepting 55 acres of the moss of Greenknowe with the consent of Queen Victoria as superior so appointed to this Disposition by her Commissioner of Crown Lands.

NOTES ON SEVEN LAMMERMUIR ROADS.

By ANGUS GRAHAM, M.A., F.S.A., F.S.A.Scot.

Of all the bodies devoted to the study of Scottish archaeology, none can possess a more enviable heritage than the Berwickshire Naturalists Club ; and of that natural heritage the most valuable component is the moorland country of the hinterland. Notwithstanding the efforts of successive generations of antiquaries, the Lammermuir Hills still retain a large measure of unsolved problems, and consequently the Club seems assured of a fruitful and interesting future. It is the purpose of this paper to touch on no more than a single aspect of the archaeology of the Lammermuir district, namely its old roads and tracks, and to summarize some recent work which bears on their origin and history.

Dere Street. The most important of this group of roads is certainly Dere Street, the Roman route to Inveresk. After entering Scotland on Brownhart Law, Dere Street traverses Roxburghshire, passes the Tweed at Newstead, and crosses the western Lammermuirs by Channelkirk and Soutra Aisle. The whole of its Scottish section has been fully described by the Ancient Monuments Commission¹, and it is therefore unnecessary to do more here than to point to some particularly interesting features that appear in its passage through the Lammermuirs.

Slight remains of the Roman road-mound can be seen near the top of the strip of trees that runs north from Channelkirk Church (477548)² ; and after an interruption Roman work reappears in the form of a terrace, with the south-western boundary-wall of a felled plantation (472553) running along the top of it. Quarry-pits are also present. This terrace can be followed, though with difficulty over mossy ground, where it tends to fade out, up to and over the watershed that forms the County march, across a spur of Dun Law, and almost to the Armet Water (453574) ; but here it is cut into and destroyed by the hollow tracks of a later and unorganized route, which has been pursuing an independent course rather

further to the west since diverging from the Roman line at a small tributary of the Rauchy Burn (469557). Between the Armet Water and Soutra Aisle there is little to be seen except the numerous and very deep hollows of this later route ; but further back, where the Roman work has not been damaged by later traffic, the method of construction of the terraced road is still clearly apparent. At one point, where the overall breadth of the terrace was found to be 61 ft., the R.C.A.M. recorded³ its constituent parts as follows : an upper scarp, 13 ft. wide and falling 2 ft. 6 in. from the top of a bank of piled-up overburden ; a flat strip 15 ft. wide ; the road-mound, 21 ft. wide and 1 ft. high ; and a quarry-ditch, 12 ft. wide and with its bottom 3 ft. below the crown of the road-mound. Elsewhere, on rather steeper transverse slopes, the scarp was noted as lower, and there was no quarry-ditch. The road-mound is formed of rammed material obtained in the scarping process, this method being adopted, presumably, for lack of stone suitable for bottoming and kerbing. Quarry-pits, and some larger quarries, can be seen at several points ; and this stretch of Dere Street, as a whole, provides an admirable object-lesson for a first essay in the study of Roman roads. North of Soutra Aisle and south of Channelkirk, the ancient roads have been largely ploughed away ; and, although a good deal has been inferred as to the course of Dere Street in the neighbouring parts of Midlothian, Berwickshire and Roxburghshire⁴, discussion of the evidence would outrun the scope of this paper.

In post-Roman times, and until today, a road on a line approximating more or less closely to that of Dere Street has, of course, continued to function as a main route to the south ; the hollow tracks mentioned above have evidently been made by its traffic. This subject, again, cannot be dealt with here in an adequate way, but it will be worth while to note, even if somewhat at random, a few records of the mediaeval route. Thus, for example, Dere Street is mentioned by name in two charters of the 12th century⁵ ; Edward II invaded Scotland by Soutra in 1314⁶ ; it was during preparations for an invasion of England that James III's favourites were hanged at Lauder in 1482 ; James IV's artillery evidently took the Soutra route to Flodden in 1513⁷; and in the 16th century armies moved

through Lauder on several occasions⁸. Again, at the turn of the 17th and 18th centuries, Sibbald recorded a "passage for Draughts" at Soutra—presumably a road fit for wheeled vehicles—but described it as "very uneasy"⁹. In 1513 its "uneasiness" must already have been marked, as the artillery train, consisting of seventeen guns with ammunition and stores, had a complement of 436 draught-oxen, 26 pack-horses and a crane¹⁰. The force of pioneers required on another road, under similar circumstances, will be noted shortly (p. 295).

Haddington to Lauderdale. This road becomes identifiable today only after leaving the modern road-system at Long Yester (545652), though its original starting-point must certainly have been Haddington¹¹. It runs by Lammer Law, Crib Law, Tollishill Dod and Addinston Hill to the Leader Water at Wiselawmill (515518). A modern cart-road accompanies the old tracks as far as Tollis Hill, but there diverges and descends by the Kelphope Burn to Carfraemill. A detailed account of this route has already been published¹², and consequently no more is required here than to draw particular attention to its principal features.

The first of these is its character as a typical "ridgeway," brought into being by traffic which kept to the highest available ground to avoid swamps, woods or steep, awkward cleughs. No signs of grading or construction appear in the whole of its length, apart from some purely superficial improvement of the cart-road; and it is clear that the earliest travellers simply set a course along the chain of hill-tops with their connecting cols and ridges¹³. Thus Lammer Law and its northern shoulder, Threep Law, were used as a way of turning the chasm of the Sting Bank Burn; while a narrow neck conveniently carried the road between the deep and very steep cleughs that go down to the Lammerlaw Burn and Harley Grain, tributaries respectively of the Kelphope Burn and Hopes Water. Crib Law, again, with the ridge that runs southwards from it, enabled the road to avoid the parallel valleys of the Kelphope and Soonhope Burns; while a tongue of slightly rising ground north-east of Wiselawmill minimised trouble in the haughlands¹⁴.

A second feature of interest is to be found in the character and behaviour of the hollow tracks of which the road is formed. These are highly typical of their class, and will supply the beginner with most of the material that he needs for an introduction to such remains. On Threep Law, for example, above the 1250 ft. contour, the steepness of the slope has encouraged the tracks to fan out in extended curves, to reduce the gradient, with result that at least eleven of them may be counted, spread over a belt of ground 150 yds. in breadth¹⁵. These tracks are not all contemporary, or of similar size or appearance ; they override and intersect one another as varying courses have been favoured from time to time, and the V-shaped section that many of them show suggests additional deepening by running water. In fact, erosion can be seen very actively at work above the head of the Sting Bank Burn (528618), and again at Criblaw Scars (526598), where cleughs are eating their way back into the belt of tracks. On the other hand, where the tracks run more or less along the contours, they change from hollows to terraces, themselves sometimes partly hollowed out ; while on the harder and more level ground they tend to fill up or flatten, leaving only lines or patches of grass or blaeberry faintly distinguishable from the darker heather alongside. In mosses everything is lost. A point of special interest to beginners in the study of moorland roads appears on the descent from Crib Law (c. 528596) ; here one of a belt of five tracks assumes the form of a terrace which expands to a width of no less than 25 ft., and such a feature might well prove most deceptive on a route where a Roman road was being looked for¹⁶.

Finally this road, like many others of its class, particularly in the Cheviot region, is associated with linear earthworks. The most considerable of these spans the narrow neck, mentioned above, between Harley Grain and the Lammerlaw Burn (526609). Where best preserved, it consists of a bank with a ditch on either side, the whole measuring 26 ft. in breadth ; it is probably older than the tracks, most of which pass through it by a gap 17 yds. wide. This earthwork is reminiscent of the "cross-dykes" common in the Cheviots¹⁷, by reason both of its irregular alignment and also of the manner in which it rests at either end on the lip of a cleugh. Other

dykes are to be seen (i) on a neck between tributaries of the Soonhope Burn and Hopes Water (527607), through which a branch from the main road passes by a gap apparently left for that purpose ; (ii) near the head of Crib Cleugh (c. 528593), in which there is a gap 15 yds. wide ; (iii) about a quarter of a mile south of the last ; (iv) on the northern slope of Threep Law. All these are ditch-and-bank works of rather slight proportions, and may represent former head-dykes or other land-boundaries.

For the dating of this road no useful evidence can be cited¹⁸. Its existence in 1726 is implied by a record of that year¹⁹ which gives the distance between Haddington and Lauder in terms which suggest that they were directly linked ; but this means little as the road is certainly older than the 18th century and might well be connected with, say, early mediaeval developments in East Lothian²⁰. For that matter, many "ridgeway" routes are ascribed to prehistoric times.

The five roads that now remain to be dealt with have been described in a recent paper²¹, and the present account will accordingly be confined to their leading features. Their general characteristics are similar to those of the Haddington-Lauderdale road, and need no further elaboration.

Haddington to Duns, by Longformacus. In taking this route today, the traveller would leave Haddington by the Waterloo Bridge, go south to Gifford, follow Highway B 6355 to the forks in National Grid square 6064, and thence proceed to Longformacus by the unnumbered by-road. The northern portion of this route, however, seems to be an adaptation of something earlier, and may have followed the rise of the village of Gifford at the turn of the 17th and 18th centuries²². An earlier version of this stretch is shown on Roy's map of 1747-55 ; this leaves Haddington by the Nungate Bridge, follows a course represented fairly clearly today by a chain of by-roads passing Monkkrigg, Cockles, Morham Bank and the western end of Bara Wood, and only coalesces with the modern line at 562679, half a mile north-west of Danskin²³. From that point onwards, however, there seems to be little difference between the older and newer routes. Roy further

marks a branch joining the road in square 5866 from the direction of Newlands ; he shows no road from square 6064 to the valley of the Whiteadder Water, on the present line of Highway B 6355, but this is probably due to an oversight.

The first feature that merits attention here is a remarkable assemblage of hollowed and terraced tracks on the north-western face of Newlands Hill (5965). An excellent view of this can be obtained from B 6355 at the crest of the rising ground just north-west of Darned House. It is an impressive example of its type, and can be compared with the one on Threep Law described above. Rising obliquely from low ground, it occupies a large slice of the hill-face between the highway and the more westerly of two deep, narrow scars ; the other scar, which seems to be of fairly recent origin, cuts through some of the lowermost of its component tracks. The arc that the tracks describe over the shoulder of the hill, to a point (c. 596654) where they are reduced in number to three, is at least 750 yds. in length, while its greatest breadth is about 150 yds²⁴. At its broadest part it contains at least sixteen tracks, mingled together in the usual confused manner. A number of the hollow tracks are flat-bottomed, as if they had been made by wheeled vehicles or sledges and not by pack-animals or cattle.

Further significant remains can be seen on this route as follows : (i) In square 6064, where the ancient and the modern road both skirt the head of the Papania Water, an obstacle which had to be passed before the routes to the Whiteadder Water and Longformacus could separate. Both hollowed and terraced tracks flank the highway in the depression at the source of the stream ; and a belt of hollow tracks, of which more are visible on air-photographs than on the ground, shortly diverge to accompany B 6355 down to the valley²⁵. (ii) At about 620629, on the descent to the head of Chapman's Slack, hollow tracks begin to appear on the south-western side of the modern road, and as the slope steepens they become very pronounced²⁶, some of them having evidently been deepened by erosion. (iii) On its approach to the Killpallet Burn the older route evidently trended downhill towards the bank of the Faseney Water, and, after passing the burn, it can be seen

mounting the lower slopes of Duddy Bank along the line of the County march. This portion of the route possesses a particular interest, as it is mentioned in a charter of Melrose Abbey dateable to the years 1227-31²⁷. This charter describes "Ricardisrode" as bounding one side of a block of land lying between the Faseney Water and the head of the Killmade Burn, and its language exactly fits the stretch of the road that traverses squares 6361, 6461 and 6560. The Richard who gave his name to the road may or may not have been Richard de Morville, who died in 1189²⁸, but it is certainly true that the latter was one of the early Norman nobles who possessed estates in East Lothian²⁹. (iv) Within and below the arc formed by the modern road in the southern part of square 6660, at least six distinctive green strips appear in the darker herbage, marking where the older road followed a more direct course.

This route was not examined beyond Wrunk Law, on account of the increasing amount of improved ground where all traces had been obliterated by the plough.

From Haddington to the Whiteadder Water, by Johnscleugh. This route led over the Lammermuirs, by Johnscleugh, Kingside and Millknowe, to Duns and the Border; but ploughing has obliterated all traces of early roadways up to and beyond Garvald, and again in the Whiteadder valley downstream from Kingside. Starting from the north, the first signs of hollow tracks are seen where the modern road crosses the Little Fen Burn (604690), while some 700 yds. further on, where the route rises from improved ground to the neck by White Castle fort, a well-marked belt of deep hollow tracks comes into being and passes the fort well above the modern road. From this point onwards the old road parallels the modern one, generally at a higher level, both of them keeping to the right bank of the Whiteadder Water, which is less steep than the left. The old tracks appear in many places, on the ground or on air-photographs, and are to be seen most clearly where they cross the tributary burns. They are lost in improved ground south-east of Kingside Hill, after having been joined by the branch that left the Longformacus road in square 6064 (*supra*)³⁰.

This route has several interesting historical associations. (i) Its existence as early as the reign of Alexander II (1214-49) is implied by a charter³¹ which mentions a ford on its line, *i.e.*, on the Kell Burn between Kingside and Penshiel. (ii) In 1496, James IV's artillery marched from Haddington to take part in a raid on England, spent the night at Johnscleugh, and arrived next day at Langton³²; it must have been this road that was used for the earlier part of the movement, though the force is likely to have left the Whiteadder Water at some point below Kingside to gain the Longformacus road (*supra*), and so avoid the detour that would have been entailed by continuing further down the valley. This switch could have been made by Penshiel, or possibly by Cranshaws. The nature of the going expected may be judged by the fact that seventy-six men were attached to the artillery with spades, shovels and pick-mattocks, "to draw the gunnis in peththis and myris."³³ (iii) Ellem, lower down the valley, was appointed as the mustering-place for the levies both in 1496³⁴ and in 1513³⁵, which again implies the use of this road for military purposes. (iv) At the turn of the 17th and 18th centuries, a route by "Myln know" (Millknowe) was mentioned by Sir Robert Sibbald as one of the only three leading out of East Lothian that were fit for "draughts."³⁶ Like the Soutra route (*supra*) it was "very uneasy." Sibbald here was most probably referring to the route by Garvald and Johnscleugh, though traffic could, of course, have reached Millknowe by branching off the Longformacus road in square 6064, as described above; and in that case the uneasy passage would presumably have been the ascent of Newlands Hill.

From Dunbar to the Dye Water and beyond, by Johnscleugh. This road emerges from the enclosed ground of Stoneypath at a point (615697) a quarter of a mile south of Moorcock Hall, the farm roadway by which it is represented within the enclosures connecting, north of the farm-house, with modern by-roads which lead towards Dunbar by way of Stenton and Pitcox. It consists, on its ascent from the upper edge of the farm-lands to the moor, of a cart-road accompanied by a belt of hollow tracks; and these can be traced, either on the ground or on air-photographs, along the line marked on the 6-inch

O.S. map to the Whiteadder Water at Johnscleugh. A great deal of traffic has evidently passed this way. Beyond the Whiteadder Water the road can either be traced, or can be inferred with confidence to have run, over Nine Stone Rig and the Kingside Burn, through the enclosed ground of Mayshiel, down Chapman's Slack to the Faseny Water in association with the Longformacus road (*supra*), up Priest Cleugh Rig and round the head of the Killpallet valley. Beyond this point its course has not been studied, but it is shown on the O.S. map as proceeding by the Mutiny Stones to Byrecleugh, on the Dye Water, whence two other routes are shown as leading respectively to Westruther by Wedderlie and to Lauder by Braidshawrig. In former times this route was in use throughout its whole length, from Stoneypath to Westruther.³⁷

The Stoneypath route possesses a long history. An estate called "Stanepeth" is mentioned in a charter of 1458³⁸, which purports to confirm an earlier one of 1359, and there is thus little reason to doubt that a "stony" track of some sort existed near by at the later of these two dates if not at the earlier. It is also tempting to suppose that its stony character was due to artificial metalling; but no evidence of this was found on a visit paid in 1960 apart from a short length of causeway on the cart-track where this crossed a moss, and it is consequently safer to conclude that the name derives from the rather numerous stones that seem to work out of the subsoil³⁹. Blaeu's map, of 1654, marks Stoneypath in two positions, corresponding respectively with the farm and the ruined tower; a tombstone of 1699, in Morham churchyard, commemorates a "fermer in Stonipath."

The Herring Road. This traditional name is recorded and explained in the Name Books compiled by the Ordnance Survey in the middle of the 19th century. "It was formerly used by the inhabitants of Lauderdale and others for the conveyance of Herring, etc., from Dunbar"⁴⁰ or again, "A track leading from Dunbar to Lauder across the moors, mostly frequented by Drovers taking herds of Cattle and Sheep to fairs, etc., formerly it was much used by Fish Hawkers, particularly during the Herring Season, hence its name."⁴¹

The road appears on the 6-inch O.S. map in three separate stretches divided by wide gaps, but it seems certain that we are in fact dealing with a single route throughout. The north-easternmost stretch⁴² extends from Common House (658716), south of Halls, across Dunbar Common to the Whiteadder Water at the mouth of the Writerspath Burn (638657); like its counterpart at Stoneypath (*supra*) it leads out of the existing system of by-roads communicating with Dunbar. A belt of hollow tracks appears clearly above the head-dyke of the Common House fields, but they are less well preserved where they cross Dunbar Common than are those coming from Stoneypath. West of the Whiteadder Water there occurs the first gap, as the name "Herring Road" only reappears on the O.S. map some four miles away to the south-west, on Little Says Law (597610); but links are pretty certainly to be seen in some faint hollow tracks on Kingside Hill, in a more recent-looking track on the same alignment near Blue House (625646), in the older of the tracks on the line of access to Faseny Cottage (609633) and in the track that runs south-west across the face of Little Collar Law. From Little Says Law the O.S. map marks an isolated stretch of "Herring Road" as running to the parish boundary on North Hart Law (567587), where the second gap begins; but there need be no hesitation in regarding the third stretch, from Wedder Law (558567) to Burncastle, in Lauderdale, as a continuation of the same route. This reconstruction of the Herring Road's course is supported by the record of a recent writer who seems to have walked its whole length;⁴³ it is true that the tradition is not altogether free of contradictions,⁴⁴ but this is no doubt natural enough if the name "Herring Road" was sometimes applied to other routes used by fish-caddies, perhaps not necessarily even leading to Lauder.

Records of the inland trade in fish can be quoted from at least the middle of the 17th century. Dunbar was "famous for the herring fishing" in 1656, and the "country people" went there from far and near when the catch was being cured and barrelled.⁴⁵ Five years earlier the "confluence of people to Dunbar for the herring fishery" had been said to amount, on occasion, to 20,000 persons.⁴⁶ The practice still persisted

in the 18th century, when the people of Westruther, at Lammas, "were in the habit of going in bands to Dunbar, and making the purchase of as many fish as would serve their families during winter."⁴⁷ Early in the 19th century "cadgers" bought fish from the fishermen and distributed it "into the inland country, and often to Edinburgh."⁴⁸

"*Muir Road from Lawder to Dunbar.*" Of the road that bears this title on Roy's map of 1747-55, there is little to be seen on the ground; but it deserves notice as affording some further evidence, additional to that of the Herring Road and of the Stoneypath-Dye Water route, of traffic between Lauderdale and the coast. When allowance is made for what seem to have been errors in drafting, it seems probable that this road shared the course of the last-named one as far as its point of emergence from the Stoneypath enclosures (615697); turned the north-western face of Clint Law, where a cart-track exists today; followed a course through ground which is unsuitable for preserving traces to the base of Newlands Hill; thence rose obliquely across the face of the hill, where its line is still faintly marked by grass against the darker background of the heather; and, after crossing Bleak Law and Harestone Hill, coalesced with the Herring Road in square 5658 or 5657. This ground has not been examined.

It will not have escaped the notice of a critical reader that the foregoing review contains some serious gaps. For example, nothing has been said about the coastal route from the south, the path of many invaders; the droving trade has only been mentioned in passing, though many of the roads must have been largely used by drovers at least after 1612;⁴⁹ and more prominence has been given to the East Lothian than the Berwickshire side of the Lammermuirs. These facts, and others which could be mentioned, all point to the openings for research which could usefully be done on roads in the Lammermuir country, and this paper may fitly close with the hope that members of the Club may some day take this up. They are, of course, particularly well placed for such work. Living, as many of them do, in or close to the area, they have excellent chances of tapping whatever may survive of the traditional lore, and for gleanings information from local records of all

sorts. Access, again, to distant sites on the moorlands is much easier for residents than for strangers, especially where cross-country vehicles are commonly available and horses are still ridden for pleasure. It is also a comfortable fact that, in the study of old roads, the amateur archaeologist is not necessarily outpaced by the professional. While practical competence in observation is naturally essential, the qualities on which such competence is chiefly built up are sharp eyes and a knowledge of the ground ; and there is far less need than in other branches of the discipline for modern techniques or the mastery of a formidable literature. On this basis the Club could add much to local history, and to knowledge of bygone conditions of life in the district, from evidence provided by the roads.

- ¹ *Roxburghshire*, 463 ff. This account should be consulted for details of construction and topography.
- ² Six-figure references are all to 100-kilometre square NT (formerly 36) of the National Grid, and can be found on sheets 62 (Edinburgh) and 63 (Dunbar) of the Ordnance Survey 1-inch map, 7th series.
- ³ *Op. cit.*, 472. See also Pl. 105 for an air-photograph which shows both the terraced Roman road and the hollowed post-Roman traffic-tracks.
- ⁴ *Ibid.*, 470 f., 473 f.
- ⁵ *Registrum Sancte Marie de Neubotle*, Bannatyne Club, 1847, Nos. 10 and 269.
- ⁶ *Calendar of Documents relating to Scotland*, H.M. General Register House, 1881-8, iii (1307-57), No. 365.
- ⁷ *O.E.C.*, xxiv, 121.
- ⁸ Examples are quoted by Rev. T. Martin, *Lauder*, 25 f.
- ⁹ *Geogr. Collections*, iii, 114.
- ¹⁰ *Accts. L. H. T.*, iv (1507-13), lxxvii f., 518 ff. It is true that some of the guns weighed up to 4000 lbs. (Mackenzie, W. M., *The Secret of Flodden*, 59.)
- ¹¹ *The Statistical Account of Scotland*, i (1791), 77. See also note 19 below.
- ¹² *P.S.A.S.*, lxxxiii (1948-9), 198 ff.
- ¹³ This process is well described by Kerr, R., *General View of the Agriculture of the County of Berwick*, 432 f., 435.
- ¹⁴ See *P.S.A.S.*, lxxxiii (1948-9), 199, Fig. 1.
- ¹⁵ *Ibid.*, 201, Fig. 2.
- ¹⁶ For a case in point, see *Roxburghshire*, No. 891 (p. 405).
- ¹⁷ On which see *Roxburghshire*, 52, and other references there given.
- ¹⁸ On the Cheviot material, see *ibid.*
- ¹⁹ *Geogr. Collections*, i, 376.
- ²⁰ The rise of Norman lordships in this region is discussed in *East Lothian*, xviii ff.
- ²¹ *P.S.A.S.*, xciii (1959-60), 217 ff.
- ²² Gifford was still "a recent foundation" in 1708 (*East Lothian*, 145).
- ²³ Some evidence confirming Roy's record is given in *P.S.A.S.*, (1959-60), 219.
- ²⁴ For a plan and illustrations, see *ibid.*, 220, fig. 3, and Pl. XIII, 1.
- ²⁵ For a plan, see *ibid.*, 222, fig. 4.

- ²⁶ For an illustration, see *ibid.*, Pl. XIII, 3.
²⁷ *Melrose*, i, No. 215, p. 193. I am indebted for the dating of this charter to Mr. G. G. Simpson, Scottish Record Office.
²⁸ As suggested by Hardie, R. P., *The Roads of Mediaeval Lauderdale*, 69.
²⁹ *East Lothian*, xviii ff.
³⁰ For a plan, see *P.S.A.S.*, xciii (1959-60), 225, fig. 5.
³¹ *Melrose*, i, No. 209, p. 189.
³² *Accts. L.H.T.*, i (1473-98), 299.
³³ *Ibid.*, 297.
³⁴ Ellis, H., *Original Letters, etc.* (1824), i, 25.
³⁵ *Accts. L.H.T.*, iv (1507-13), 416. Pitcottie seems to have been wrong in placing this muster on the Burgh Muir of Edinburgh (*O.E.C.*, xxiv, 121).
³⁶ *Geogr. Collections*, iii, 114. The other two were by Soutra and Cockburnspath.
³⁷ Information from Mr. Tom Elliot, Killpallet.
³⁸ *The Register of the Great Seal of Scotland*, 1424-1513, No. 610, p. 136.
³⁹ For further discussion of this point, see *P.S.A.S.*, xciii (1959-60), 228.
⁴⁰ Book 4, p. 28, Stenton parish 1853 (?).
⁴¹ Book 26, p. 35, Longformacus parish, 1857.
⁴² Confirmed to the writer by Mr. J. Jeffrey, Deuchrie.
⁴³ McConachie, Rev. W., *The Glamour of the Glen* (1930), 214 ff.; see also *History of the Berwickshire Naturalists' Club*, xxvii, 45.
⁴⁴ E.g. in *Berwickshire*, No. 252, which, however, can hardly be made to accord with the local topography.
⁴⁵ Cf. Martine, J., *Reminiscences and Notices of Ten Parishes in the County of Haddington* (1894), 120.
⁴⁶ Hume Brown, P., *Early Travellers in Scotland*, 232, quoting Ray's *Itinerary*.
⁴⁷ *The New Statistical Account of Scotland*, ii (Berwickshire), 77. See also Martin, Rev. T., *Lauder*, 180.
⁴⁸ Kerr, R., *General View of the Agriculture of the County of Berwick* (1809), 459.
⁴⁹ In that year Duns was appointed as the place where dues had to be paid on all cattle passing the eastern Border (Haldane, A. R. B., *The Drove Roads of Scotland*, 16, quoting *The Register of the Privy Council of Scotland*, H. M. General Register House, 1887- , 1st series, ix, 394).

ABBREVIATIONS USED IN FOOTNOTE REFERENCES

<i>Accts. L.H.T.</i>	<i>Accounts of the Lord High Treasurer of Scotland</i> , H.M. General Register House, 1877-1916.
<i>Berwickshire.</i>	R.C.A.M., <i>Inventory of Monuments and Constructions in the County of Berwick</i> , H.M. Stationery Office, 1915.
<i>East Lothian.</i>	R.C.A.M., <i>Inventory of Monuments and Constructions in the County of East Lothian</i> , H.M. Stationery Office, 1924.
<i>Geogr Collections.</i>	Macfarlane, W., <i>Geographical Collections relating to Scotland</i> , Scottish Historical Society, 1906-8.
<i>Melrose.</i>	<i>Liber Sancte Marie de Melros</i> , Bannatyne Club, 1837.
<i>O.E.C.</i>	<i>The Book of the Old Edinburgh Club</i> .
<i>O.S.</i>	Ordnance Survey.
<i>P.S.A.S.</i>	<i>Proceedings of the Society of Antiquaries of Scotland</i> .
<i>R.C.A.M.</i>	Royal Commission on the Ancient and Historical Monuments of Scotland.
<i>Roxburghshire.</i>	R.C.A.M., <i>Inventory of the Ancient Monuments and Constructions in Roxburghshire</i> , H.M. Stationery Office, 1956.

BRITISH ASSOCIATION REPORT, 1961.

By Mrs. M. H. McWHIR.

Norwich, the capital of East Anglia is a city where the past and present exist side by side. Its two most imposing features are both a heritage of the past—the cathedral and the Castle are of Norman design. The former dates from 1096, and its tapering spire rises over the city to a height of 315 ft.

The castle stands on a huge mound, and is a well-known landmark throughout Norwich ; it houses a fine museum.

The city is singularly rich in beautiful old Parish churches and ancient buildings. There is a 15th century Guildhall on one side of the Market Square, and on the other the lovely Church of St. Peter's Mancroft.

Amongst these ancient and historic surroundings the British Association for the Advancement of Science held their Annual Conference in September, 1961. The Inauguration Ceremony took place in St. Andrews Hall ; which at one time was the nave of the Church of the Dominicans or Black Friars, now used as a Civic Hall. Adjoining is Blackfriars Hall, formerly the Chancel of the Church, and of old, intimately connected with the Dutch Congregation for several centuries.

The Scientists from all over the World, in their academic robes, made an impressive and most colourful picture as they filed to their allotted seats on the platform. Lovely organ music pealed through the hall, the huge audience standing until the last picturesque figure had taken his place. The Mayor of Norwich, Mr. R. A. Gurney, then welcomed the British Association to the City. Sir Wilfred Le Gros Clark, F.R.S., the President for 1961, then commenced his Presidential Address—it was entitled "The Humanity of Man."

He said that, " Sir William Crooks in his Address at Bristol 60 years ago, remarked that while formerly the Presidents unrolled to the Meeting a panorama of the years progress in the sciences, now, he usually restricted himself to speculations connected with his own work, or dealt with questions

uppermost in people's minds for the time being." He went on to say, he had both these aspects in mind. "My own studies have for many years been related to man, as he was in the past and as he is now—these studies naturally deal with problems of the immediate future." Sir Wilfred continued, "Just as many people rightly seek to take stock of their personal achievements and failures at the end of each year, and aim to improve defects by resolving to carry out certain plans for the New Year. I think it is most necessary because of the dangers and uncertainties looming ahead, to take stock of the species whose evolution has culminated in mankind as he is to-day." He continued, "Let us not deceive ourselves, the frightening question is now presenting itself whether the civilisation which mankind has slowly and laboriously built up over a period of many thousands of years, can avoid dissolution as a result of uncontrollable struggles for political power or economic superiority. This is not to be taken as a melodramatic statement—it expresses a truth, which is quite evident to anyone who cares to read the signs of the times."

The President said, naturally, in the course of a short address, he could only make a very brief reference to some few aspects by attempting a rapid review of how we came to be, and how we are constituted. He said, when the British Association met in Norwich in 1868 the fossil evidence of human evolution was practically non-existent. He told us, in the past that the free intercourse between scholars of different countries by travel and correspondence, was first demonstrated in the early days, when it was a common custom for scientists to undertake arduous journeys from this country to the great mediaeval universities of the continent to acquaint themselves with current advances in scientific knowledge. Even during the Napoleonic Wars and American Civil War, he remarked that Sir Gavin de Beer has recorded in his book (*The Sciences were never at War*).

The President said scientists were even able to travel unmolested through enemy territories. Unhappily the situation has completely changed in our time, but he said, I think that scientists in general, all over the world, are still striving

to maintain a sense of unity in the face of very frustrating circumstances.

He said that the British Association can, with reason, claim a good share in the promotion of International unity through the medium of science. It also has always welcomed as its guests, at the Annual Meeting, distinguished scientists from overseas. More than this, by its lecture services of young peoples programmes, International Youth Science Conferences, Science Fairs and so forth, made an ever increasing contribution towards the development of more widespread scientific education. He had tried to emphasise that the spirit of freedom in scientific enquiry is an essential attribute of the humanity of man. He said that this could do more than anything to preserve and intensify the feeling of harmony amongst all peoples of the world.

Sir Wilfred finished his address by saying we need to press ahead in our efforts with the utmost vigour, for the dangers which now threaten the unity of mankind are formidable indeed.

He ended his most interesting and learned address by these prophetic words: "And time is getting short."

During this busy and strenuous week many interesting films were shown, especially suitable for discussions between Arts and Science students. Through the week lectures went on almost continuously causing each morning much thought as to which section to attend.

Dr. J. W. Corran, chief chemist of Messrs. J. & J. Colman Ltd., Norwich, suggested to the Association that the New University of East Anglia would offer an ideal centre for the training of food scientists and technologists. Dr. Corran was one of four principal speakers in the chemistry section discussion on the training of industrial food scientists. They called on the British Association Council to take stock of existing facilities and consider how they can be expanded to cater not only for home students, but also for those from undeveloped countries.

The Association also heard lectures by two former Norfolk school boys. Graham Goold, aged 18, his lecture was entitled "Transport on a cushion of air." He also showed us his own models of Hovercraft.

David Clare spoke on the Ecology of *Bryum argenteum* (a dark green moss).

In the archaeological section H. we were told of a remarkable aerial photograph taken in 1928, vividly showing beneath growing corn the walls and regular pattern of the streets belonging to the lost town of (Venta Icenorm) at Caister, St. Edmunds. Professor Daikinson, the Curator of the Corium Museum Cirencester, lecturing on the discoveries, said large parts of the North wall were still standing though masked by vegetation and in a very precarious condition.

Section H. Archaeology held their dinner this year at Caister Hall Country Club. The building in which the above function took place, was formerly the Rectory of the Parish of Caister, St. Edmunds. We were shown the remains of Roman houses and the members had the opportunity before dinner was served of examining these most interesting relics of a bygone age. Another most interesting expedition was a visit to Strangers' Hall. This medieval building contained many interesting and beautiful pieces of furniture and china of different periods. It was the home of Nicholas Southerton, Mayor of Norwich in 1539.

It is really a marvellous example of domestic life through the ages to the present day. With lectures, garden parties, receptions and excursions, this busy week went swiftly by.

As there were no lectures on the Saturday an all-day excursion was indicated. After a long interesting bus run we arrived at Yarmouth. Our first stop was a visit to South Denes Power Station. This huge building was officially opened on September 26th, 1958, by Colonel Sir Edmund Bacon, O.B.E., T.D., J.P., Her Majesty's Lord Lieutenant for Norfolk. A visit to this generating station is truly wonderful. Amongst the many marvels revealed to us was the turbine room, it houses four 60,000 kilowatt generating sets which we were told run at a speed of 3,000 revolutions per minute. Three immense fuel oil storage tanks, give a total storage capacity of 38,500 tons. Hot water heaters in the tanks keep the fuel oil the correct heat for economic pumping. A canteen in a separate building is fitted with the most up-to-date modern electrical equipment. Here we were all most hospitably entertained to lunch by the management of the

station. Thereafter we re-entered the waiting buses and sped through the Norfolk countryside. It is really a district without its counterpart in the British Isles, and it is full of charm and quiet beauty. Leaving the buses we embarked on one of the many Broadland boats. There are 5,000 acres covering the Norfolk Broads and 200 miles of gliding waters. Sailing up the Broads all afternoon was a most enjoyable and memorable experience. Gliding along we noticed many species of moths and butterflies, also many beautiful wild birds.

The botanist also would revel in the many kinds of wild flowers growing in great profusion by the side of these placid waters.

Sunday dawned, and in Norwich Cathedral, the Bishop Doctor Launcelot Fleming took as the theme of his discourse "that you cannot disprove Genesis by discovering fossils." The lessons were read by Canon R. A. Edwards and Mr. Paul Blake, President of the Free Church Council.

After this most impressive service held in the lovely and ancient Cathedral, the President accompanied by the Mayor of Norwich led the procession slowly down the aisle.

In the afternoon members were conveyed by buses to Raveningham Hall, the home of the Lord Lieutenant of Norfolk. Guests wandered through the beautiful grounds and a band played lovely melodies in the background.

At a meeting of the Council Sir John Cockcroft was elected President for 1962. He will preside at the 124th Meeting to be held in Manchester in late August and early September. He is Master of Churchill College, a new foundation in the University of Cambridge. Amongst his many honours are the Nobel Prize, the Hughes Medal, The Royal Medal of the Royal Society, The Medal of Freedom of the United States, and the 1961 Atoms Peace Prize, also in 1957, "The Order of Merit."

On the closing day, the following Wednesday, at the final meeting of the General Committee, the usual thanks were voiced by Sir Wilfred Le Gros Clark for hospitality and kindness by the Norwich citizens and all others who had helped to make the 123rd Meeting of the Association a memorable one.

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part V.

By A. G. LONG, M. Sc., F.R.E.S.

SUPER-FAMILY AGROTIDES.

Family CARADRINIDAE (Contd.)

146. *Tholera popularis* Fabr. Feathered Gothic. 310.
- 1876 Ayton Castle, two at light (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
- 1927 Shaw took it sparingly at Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 153).
- 1952 Gavinton, three at street lamps, August 17-20.
- 1953 Gavinton, three at street lamps, August 14-29.
- 1954 Kyles Hill, one at Tilley lamp, September 5.
- 1955 Gavinton, ten at m.v. trap, August 14-25; Duns Castle Lake, one August 22; Gordon Moss, one August 26.
- 1956 Old Cambus Quarry, August 20; Hirsell, several, August 23; Pettico Wick, one, August 25 (E. C. Pelham-Clinton).
- 1957 Gavinton, August 7.
- 1958 Birgham House, August 10.
- 1959 Birgham House, August 12 (Grace A. Elliot).
- 1960 Pettico Wick, one female at light, August 27 (E. C. Pelham-Clinton).

Summary.—Common and widespread from the coast and the Tweed to the hills. It emerges about mid-August and continues into September being most readily taken at light.

147. *Tholera cespitis* Fabr. Hedge Rustic. 311.

- 1875 Recorded in error by W. Shaw, *H.B.N.C.*, Vol. VII, p. 482 (see G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 153).
 1902 " Must have got this among the bogs of Lauder Hill " (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1956 Hirsell Loch, one at m.v. lamp, September 7.
 1960 Birgham House, one at m.v. lamp, August 22 (Grace A. Elliot).

Summary.—Local, probably established along the Tweed valley. Comes to light in late August and early September.

148. *Cerapteryx graminis* Linn. Antler. 312.

- 1835 Earlston, July 29 (P. J. Selby and G. Johnston, *H.B.N.C.*, Vol. I, p. 95).
 1873 Longcroft Broad Bog—a plague (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Hoardweel Moor, very common at night and on Stoneshiel in daytime (A. Anderson, *H.B.N.C.*, Vol. VII, p. 232).
 1877 Threeburnford, several (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
 1914 St. Abb's Lighthouse, twenty-seven on August 1 (W. Evans, *Scot. Nat.* 1914, pp. 231-2).
 1927 Common throughout the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 151).
 1952 Gavinton, street lamps, July 16-August 6; Gordon, a few, August 10 (E. C. Pelham-Clinton); Preston Cleugh, flying in forenoon, a pair *in cop.*, August 21.
 1953 Gavinton, July 12-August 7.
 1954 Gavinton, July 31-August 25.
 1955 Gavinton, Gordon Moss, Spottiswoode, Bell Wood, Kyles Hill, Duns Castle Lake, Retreat, July 18-September 3 (A.G.L. and E. C. Pelham-Clinton).

- 1956 Gordon Moss, Gavinton, Hirsell, Burnmouth, Aiky Wood near Whitegate, Cove (daytime), Old Cambus Dean, Pettico Wick, Kyles Hill, July 18-September 8 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gordon Moss, larvæ on April 28 and June 9 (E. C. Pelham-Clinton) ; Gavinton, August 7.
- 1959 Gavinton, July 11-August 11.
- 1960 Gavinton, July 13-August 20 ; Pettico Wick, August 27 (E. C. Pelham-Clinton).
- 1961 Birgham House, August 6 (Grace A. Elliot).

Summary.—Widespread and common everywhere flying both by day and night. It is on the wing from about mid-July to early September. The larvæ may become a serious grassland pest in some years.

149. *Eumichtis adusta* Esp. Dark Brocade. 314.

- 1843 Near Pease Bridge (J. Hardy, *H.B.N.C.*, Vol. II, p. 110).
- 1872 Addinstone, one (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
- 1874 Duns and Eyemouth (A. Kelly, *ibid.* p. 233).
- 1876 Ayton woods, not common (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Airhouse Wood, not common (A. Kelly, *Lauder and Lauderdale*, p. 309).
- 1911 St. Abb's Lighthouse, one July 27 (W. Evans, *Scot. Nat.* 1914, p. 282).
- 1927 Widely distributed, not uncommon, has occurred at Foulden (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 151).
- 1951 Gordon Moss, a few at sugar, June 30 (E. C. Pelham-Clinton).
- 1954 Cockburnspath, a few at sugar, June 26 (E. C. Pelham-Clinton).
- 1955 Kyles Hill, Gavinton, Oxendean Pond, Coldingham Moor (commonest species at m.v. light), Gordon Moss (several), May 29-July 18 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gordon Moss, fifteen at m.v. light, June 11 and 21 (E. C. Pelham-Clinton).

- 1957 Kyles Hill, one under a beehive roof, May 25 ; Gavinton, five at m.v. light, May 27-June 21 ; Gordon Moss, a few at sugar and light, June 8 (E. C. Pelham-Clinton).
 1960 Gavinton, one in m.v. trap, May 31.

Summary.—A common species on high ground and lowland heath. It starts to emerge towards the end of May and continues on the wing until mid July. A frequent visitor to treacle and light.

150. *Dryobotodes protea* Schiff. Brindled Green. 316.

- 1873 One. (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
 1874 Plentiful at Aiky Wood (A. Kelly, *ibid.* p. 233).
 1880 Aiky Wood and Abbey St. Bathans (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
 1902 Lauderdale, comes freely to sugar, Addinston Policies (A. Kelly, *Lauder and Lauderdale*, p. 309).
 1927 Well distributed, recorded for Eyemouth, Ayton, Preston and Duns (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 161).
 1954 Between Gavinton and Nesbit, seven at sugar, September 11-October 6.
 1955 Retreat, September 3 ; Elba, September 18 at m.v. light.
 1956 Hirsell, at sugar and light, September 7 and 20 ; Gavinton, September 9.

Summary.—Well distributed and fairly common where there are oak woods. It starts to emerge about the beginning of September and continues into early October.

151. *Bombycia viminalis* Fabr. Minor Shoulder Knot. 317.
 1927 Renton took it at Gordon Moss (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 162).
 1952 Gordon Moss, a few at sugar, August 10 (E. C. Pelham-Clinton).
 1955 Gordon Moss, several, July 21 and August 2 ; Gavinton, two at m.v. trap, August 5 ; Kyles Hill, four, August 12 and 19.

- 1956 Gordon Moss, several at m.v. light, August 10 ; Kyles Hill, one August 24.
 1957 Gordon Moss, three at m.v. light, July 20 (E. C. Pelham-Clinton).

Summary.—The larva of this species feeds on willows in May. Probably the species is established more widely in Berwickshire than the records show. Both light and dark forms occur. The imagines begin to emerge in late July and continue on the wing through August coming to sugar and light.

152. *Hyppa rectilinea* Esp. Saxon. 323.

- 1951 Gordon Moss, several at sugar, June 30.
 1954 Gordon Moss, a few at sugar, June 27 (both these records by E. C. Pelham-Clinton).
 1955 Gordon Moss, ten at sugar, June 24, July 1 and 4 (A.G.L.)
 1956 Gordon Moss, twelve at light, June 11 (E. C. Pelham-Clinton) ; three fresh specimens at sugar, June 14 ; Kyles Hill, five at m.v. light, June 21 and 26 (A.G.L.).
 1957 Gordon Moss, several at sugar, June 8 (E. C. Pelham-Clinton).

Summary.—This handsome species is known to be established at Gordon Moss and Kyles Hill and may possibly occur elsewhere. The specimens have grey to brown markings but some are darker with a jet black band across the forewings. It emerges about the second week in June and continues into July.

153. *Luperina testacea* Schiff. Flounced Rustic. 324.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1927 Common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 162).
 1952 Gavinton, common at lamps, August 2-30 (A.G.L.) ; Dowlaw, one at light, August 30 (E. C. Pelham-Clinton).
 1953 Gavinton, August 14-September 13.

- 1954 Gavinton, August 24-30.
 1955 Gavinton, August 6-30 ; Kyles Hill, August 12 and 13 ;
 Duns Castle Lake, August 22 ; Coldingham, August
 27 ; Elba, September 18 (A.G.L. and E. C. Pelham-
 Clinton).
 1956 Gavinton, Burnmouth, Aiky Wood, Gordon Moss,
 Old Cambus Quarry, Pettico Wick, Hirsell, Kyles
 Hill, August 5-September 21 (A.G.L. and E. C.
 Pelham Clinton).
 1957 Gavinton, August 5 ; Pettico Wick, August 27.
 1959 Gavinton, August 7.
 1960 Gavinton, August 4-September 3.
 1961 Gavinton, August 7-September 23 ; Birgham House,
 August 20-September 23 (Grace A. Elliot).

Summary.—An abundant species all over the county flying from the first week in August to the last week of September, it comes commonly to light. Most specimens are pale in colour but dark forms occur at the coast.

- *154. *Thalpophila matura* Hufn. Straw Underwing. 327.
 1874 Eyemouth, at sugar on highest part of sea-bank at
 Gunsgreen (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).
 1927 Well distributed along the coast but seldom numerous.
 Has occurred at Ayton and Old Cambus sparingly.
 (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 163).

Summary.—We have no recent records of this species in the county. The imago is out in August and visits sugar. Robson recorded it at flowers of Ragwort and Marram Grass.

155. *Procus strigilis* Clerck. Marbled Minor. 328.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1877 Threburnford, several (R. Renton, *H.B.N.C.*, Vol.
 VIII, p. 320).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Lauderdale (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Common and well distributed (G. Bolam, *H.B.N.C.*,
 Vol. XXVI, p. 167).
 1952 Gavinton, at sugar and light, July 1-16.

- 1953 Gavinton lamps, July 6.
 1954 Cockburnspath, at sugar, June 26 (E. C. Pelham-Clinton) ; Gavinton, July 9-31.
 1955 Gavinton, Gordon Moss, Retreat, Kyles Hill, June 30-August 12.
 1956 Hirsell, Broomhouse, Gordon Moss, Linkum Bay (common and very variable), Nab Dean Pond, Old Cambus Quarry, June 15-July 24 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton, July 5 ; Gordon Moss, July 20.
 1959 Gavinton, July 15.
 1960 Gavinton, June 9, many taken at Birgham House (G. A. Elliot).
 1961 Gavinton, July 10-30.

Summary.—An abundant species all over the county, both marbled and dark forms occurring. It sometimes appears as early as mid-June but is most common in July continuing into early August. (*N.B.*—All records confirmed by genitalia examination).

156. *Procus latruncula* Schiff. Tawny Minor. 329.

- 1954 Gavinton, one at light, July 23.
 1955 Gordon Moss, one at m.v. light, August 2.

Summary.—Probably widespread but not common. The identification was made by examination of the genitalia and confirmed by E. C. Pelham-Clinton.

157. *Procus fasciuncula* Haw.

Middle-barred Minor. 331.

- 1877 Threeburnford, two (R. Renton, *H.B.N.C.*, Vol VIII, p. 321).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Lauderdale, at Guelder Rose in garden (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Common in most places (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 167).
 1951 Gordon Moss, at sugar, June 30 (E. C. Pelham-Clinton)

- 1952 Gavinton, very common at lamps, June 14-July 10.
 1953 Gavinton, June 25-July 4.
 1954 Gavinton and Kyles Hill, July 3-August 5.
 1955 Gavinton, Gordon Moss, Spottiswoode, Retreat, Kyles Hill, at sugar, ragwort and light, abundant, June 24-August 12 (A.G.L. and E. C. Pelham-Clinton).
 1956 Broomhouse, Hirsell, Linkum Bay, Nab Dean Pond, Old Cambus Dean, Gordon Moss, June 20-August 10.
 1957 Gavinton, June 17; Gordon Moss, July 20 (E. C. Pelham-Clinton).
 1960 Gavinton, June 17-22.
 1961 Birgham House, July 1 (Grace A. Elliot).

Summary.—A common species especially in damp localities. It emerges at its earliest about mid-June and may continue on the wing well into August.

158. *Procus literosa* Haw. Rosy Minor. 332.

- 1843 Near Pease Bridge taken by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol II, p. 110).
 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1902 Lauderdale, more common on coast than inland (A. Kelly in *Lauder and Lauderdale* p. 305).
 1927 Well distributed, most numerous near the coast (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 167).
 1951 Cockburnspath, one at Ragwort, August 26 (E. C. Pelham-Clinton).
 1952 Dowlaw, August 30 (E. C. Pelham-Clinton).
 1953 Gavinton, one at light, August 11.
 1954 Gavinton, one, August 24.
 1955 Retreat, one, July 31; Gavinton, one, August 20, at m.v. light.
 1956 Gavinton, one, August 1; Burnmouth, three, August 2, 6 and 26; Aiky Wood near Whitegate, two at treacle, August 9; Gordon Moss, August 10; Old Cambus Quarry, August 20.
 1959 Gavinton, July 20; Birgham House, July 21 and August 12 (Grace A. Elliot).

- 1960 Gavinton, two, July 27; Birgham House, August 5
(G. A. Elliot).
1961 Gavinton, one, August 25.

Summary.—Occurs widely but sparingly inland, more common at the coast. It begins to emerge about the last week in July and continues throughout August coming to light, sugar and Ragwort.

159. *Procus furuncula* Schiff. Cloaked Minor. 333.

- 1927 Common from sea-links to well up amongst westward hills (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 167).
1956 Hirsel, one at m.v. light, July 24; Burnmouth, one at m.v. light, August 6; Cove, one flying in daytime, August 19.

Summary.—The few records suggest that this species is probably established at the coast and in the Tweed valley but not so well as the other species of the genus.

[*Apamea oblonga* Haw. (*abjecta* Hübn.)

Crescent Striped. 337.

- 1902 This moth passed through the hands of Dr. White. Three or four specimens boxed in Addinston Policy. Not recorded in the "Perth Fauna" (A. Kelly in *Lauder and Lauderdale*, p. 305).
1927 Bolam repeated Kelly's record (*H.B.N.C.*, Vol. XXVI, p. 163). *N.B.*—Kelly recorded it in 1873 but in 1874 he corrected this saying the specimen was a rubbed Dark Brocade (*H.B.N.C.*, Vol VII, p. 233).

Summary.—As this is a species occurring on sand dunes and salt marshes it is not likely to be indigenous to Berwickshire.].

*160. *Apamea anceps* Hübn. Large Nutmeg. 338.

- 1874 Eyemouth, at sugar (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235).

- 1874 Lauderdale, in Addinston Policy (A. Kelly, *ibid.*, p. 233).
 1877 Eyemouth sea banks, not uncommon (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).
 1902 Lauderdale, not common (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Apparently very local and perhaps rare (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 164).

Summary.—We have no recent records of this coastal species in the county. The larva is a grass feeder and the imago flies in June and July. Robson recorded it for Northumberland and Durham and said that it came regularly to Campion flowers and occasionally to sugar.

161. *Apamea furva* Hübn. Confused. 339.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Eyemouth, at Wood Sage and sugar (W. Shaw, *ibid.*, p. 235).
 1914 St. Abb's Lighthouse, three on July 12 (W. Evans, *Scot. Nat.*, 1914, p. 232).
 1927 Shaw found it rather commonly about the top of the sea cliffs east of Eyemouth. It likewise occurs at St. Abb's Head (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 164).
 1951 Cockburnspath, one at Ragwort, August 26 (E. C. Pelham-Clinton).
 1955 Spottiswood, one at m.v. light, July 27 ; Gavinton, one on July 31 ; Bell Wood, one at sugar, August 4.
 1956 Pettico Wick, two at light and one smoked, July 28, 29 (E. C. Pelham-Clinton) ; Bell Wood, July 10 ; Old Cambus Dean, July 15, August 20 and September 1 ; Gordon Moss, July 18 ; Linkum Bay, July 21 ; Burnmouth, August 6 and 26 ; most at m.v. light, a few at treacle (A.G.L.).

Summary.—Widespread, but partial to high ground and the coast. The imago flies from about mid-July to the end of August and comes to light and sugar. Bolam collected larvæ at grass roots on Berwick town walls in May and June (*H.B.N.C.*, Vol. XV., p. 305).

162. *Apamea remissa* Hübn. (*obscura* Haw.)

Dusky Brocade. 340.

- 1902 Addinston (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Generally distributed, usually abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 166).
 1951 Gordon Moss, a few at sugar, June 30 (E. C. Pelham-Clinton).
 1952 Gavinton, lamps and sugar, June 25-July 16 ; Gordon Moss, June 14 (A.G.L. and E. C. Pelham-Clinton).
 1953 Gavinton, June 12.
 1954 Gavinton, July 7-21 ; Cockburnspath, June 26 ; Gordon Moss, June 27 (A.G.L. and E. C. Pelham-Clinton).
 1955 Gavinton, Gordon Moss, Kyles Hill, Spottiswoode, June 17-July 30.
 1956 Gavinton, Broomhouse, Bell Wood, Hirsell, Linkum Bay, Gordon Moss, Pettico Wick, Kyles Hill, Old Cambus Dean, June 16-July 28 (A.G.L. and E. C. Pelham-Clinton).
 1957 Langton and Kyles Hill, June 29 and 30 (A.G.L.) ; Gordon Moss, June 8 and 20 (E. C. Pelham-Clinton).
 1958 Fogo, July 24.
 1959 Gavinton, July 10 and 16.
 1961 Gavinton, July 19 and 22 ; Birgham House, July 19-21 (Grace A. Elliot).

Summary.—A very common species at sugar and light all over the county. The imago varies from the finely mottled form to one with very distinctive light and dark markings. It flies from the second week in June to about the end of July so that it is an earlier species than *A. furva* with which it can be confused.

163. *Apamea sordens* Hufn.

Rustic Shoulder Knot. 341.

- 1877 Threeburnford, very common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).

- 1902 Lauderdale, too common (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Common everywhere (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 166).
 1952 Gavinton, lamps, June 17-July 3.
 1953 Gavinton, June 6 and 26.
 1954 Cockburnspath, June 26 ; Gordon Moss, June 27 (E. C. Pelham-Clinton).
 1955 Gavinton and Gordon Moss, June 2-July 23.
 1956 Gavinton, Hirsell, Paxton Dean, Gordon Moss, Broomhouse, Kyles Hill, Bell Wood, Linkum Bay, Nab Dean, common at m.v. light, May 27-July 10. Burnmouth, one worn specimen flying in daytime, July 23 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton and Gordon Moss, May 30 to June 30 (A.G.L. and E. C. Pelham-Clinton).
 1959 Gavinton, July 11.
 1960 Gavinton, June 3 ; several at Birgham House (Grace A. Elliot).
 1961 Gavinton, July 10.

Summary.—Widespread and common flying from about the last week of May throughout June and well into July.

164. *Apamea unanimitis* Hübn.

Small Clouded Brindle. 342.

- 1874 Broomhouse, not uncommon (A. Anderson, *H.B.N.C.*, Vol. VII, p. 232).
 1875 Eyemouth, one (W. Shaw, *ibid.*, p. 482).
 1875 Ayton, confirmed by Dr. Buchanan White ; reniform is perfectly white (S. Buglass, *ibid.*, p. 483).
 1902 Lauder, rare (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Very local, far from common. Has been got, rarely, at Lauder (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 166).
 1956 Nab Dean Pond near Paxton, one at m.v. light, July 7.

1960 Paxton, one on Tweed banks by S. McNeill.

Summary.—This species occurs in low lying damp localities along burns and rivers where its food plant grows—*Digraphis arundinacea* (reed grass). The imago flies from early June until early July—before *A. secalis*, with some varieties of which it can be confused. The larva should be searched for in September when it is fully fed prior to hibernation. The moth comes both to sugar and light.

[*Apamea pabulatricula* Brahm. Union Rustic. 343.

1877 Threeburnford, several (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).

Summary.—This is a very local species and Baron de Worms now considers it a “lost species.” Formerly it came to sugar in early August and September but it had apparently become extinct (in Britain) by 1919 although an odd specimen was taken at Bushey Heath in 1935. It would be of interest if some lepidopterist could work the Threeburnford district with m.v. light and treacle in August to see if the species has survived though this is very unlikely.].

165. *Apamea secalis* Linn. Common Rustic. 344.

1856 St. Abbs, recorded under the name *A. oculate* (R. Embleton, *H.B.N.C.*, Vol. III, p. 220). The date given, however, is June 25, this is earlier than any I have recorded and more in keeping with *A. unanimitis*.

1902 Lauderdale, common (A. Kelly in *Lauder and Lauderdale*, p. 305).

1927 Abundant throughout the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 166).

1951 Cockburnspath, several at sugar and ragwort, August 26 (E. C. Pelham-Clinton).

1952 Gavinton, Gordon Moss, Dowlaw, July 14-August 30 (A.G.L. and E. C. Pelham-Clinton).

1953 Gavinton, July 25-September 5.

1954 Gavinton, July 18-September 15.

- 1955 Gavinton, Kyles Hill, Retreat, Elba, Gordon Moss, Duns Castle Lake, Coldingham, July 18-September 18 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Old Cambus Dean, Pettico Wick, Gordon Moss, Hirsell, Gavinton, Burnmouth, Aiky Wood near Whitegate, Cove, Kyles Hill, July 15-September 21 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, July 13-August 5.
- 1959 Gavinton, July 15.
- 1960 Gavinton, July 13-August 7 ; Pettico Wick, August 27 (E. C. Pelham-Clinton).
- 1961 Gavinton, July 23 ; Birgham House, July 22-August 20 (Grace A. Elliot).

Summary.—An abundant and variable species. It first emerges about mid-July and may be taken at sugar and light throughout August and well into September (latest date September 21).

166. *Apamea crenata* Hufn. Cloud-bordered Brindle. 346.
- 1877 Threeburnford, very common at sugar (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
- 1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 304).
- 1951 Gordon Moss, several at sugar, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton and Gordon, June 14-July 10 (A.G.L. and E. C. Pelham-Clinton).
- 1953 Gavinton and Lees Cleugh, June 12-July 6.
- 1954 Gavinton, Gordon Moss, Cockburnspath, June 26-August 1 (A.G.L. and E. C. Pelham-Clinton).
- 1955 Oxendean Pond, Gavinton, Coldingham Moor, Gordon Moss, Spottiswoode, June 4-August 2 (A.G.L. and E. C. Pelham-Clinton).
- 1956 Retreat, Gavinton, Gordon Moss, Hirsell, Broomhouse, Kyles Hill, Bell Wood, Linkum Bay, Nab Dean, June 7-July 24 (A.G.L. and E. C. Pelham-Clinton).

- 1957 Gavinton, one emerged from pupa June 9 (A.G.L.) ;
Gordon Moss, several at sugar and light, June 8
(E. C. Pelham-Clinton).
1958 Langton and Kyles Hill, July 7 and 11.
1959 Gavinton, July 11.
1960 Gavinton, June 16 ; several at Birgham House (Grace
A. Elliot).

Summary.—A very common species on both high and low ground. There are all gradations from the dark reddish form to the paler ochreous form and some, occurring for example on Gordon Moss, have an almost white ground-colour. The imago starts to emerge about the first week in June and continues on the wing until about the end of July. It is a frequent visitor to sugar and common at light.

167. *Apamea lythoxylea* Fabr. Light Arches. 347.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
1902 Lauderdale, common at sugar (A. Kelly in *Lauder and Lauderdale*, p. 304).
1927 Generally distributed and fairly common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 164).
1952 Gavinton, at sugar and light, July 10-26.
1953 Gavinton, July 30.
1954 Gavinton, July 28, August 6.
1955 Kyles Hill, July 10, Gavinton, August 13.
1956 Linkum Bay, Burnmouth, Aiky Wood near Whitegate,
Gordon Moss, June 30-August 10.
1957 Gavinton, Gordon Moss, July 17 and 20 (A.G.L. and
E. C. Pelham-Clinton).
1959 Gavinton, July 25, Birgham House, August 12 (Grace
A. Elliot).
1960 Gavinton, June 23.

Summary.—Widespread and fairly common though not so abundant as *A. monoglypha*. The imago is usually taken between mid-July and mid-August and comes both to sugar and light. The specimens are surprisingly uniform in size and colour.

[*Apamea sublustris* Esp. Reddish Light Arches. 348.

1902 At Lauder, rare (A. Kelly in *Lauder and Lauderdale*, p. 304).

Summary.—This is a moth of limestone localities and chalk downs often near the sea. Bolam had no Berwickshire record but quoted Selby as recording it for Twizel (Northumberland). Robson considered this record dubious].

168. *Apamea monoglypha* Hufn. Dark Arches. 350.

1877 Threeburnford, very common at sugar (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).

1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).

1902 Lauderdale, very common (A. Kelly in *Lauder and Lauderdale*, p. 304).

1913 St. Abb's Lighthouse, twenty-six on July 12 and one July 7, 1914 (W. Evans, *Scot. Nat.*, 1914, p. 231).

1927 Abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 165).

1951 Cockburnspath, several at sugar, August 26 (E. C. Pelham-Clinton).

1952 Gavinton, Gordon Moss, Dowlaw, June 28-September 20 (A.G.L. and E. C. Pelham-Clinton).

1953 Gavinton, July 4-September 21.

1954 Gavinton, Cockburnspath, June 26-October 2 (A.G.L. and E. C. Pelham-Clinton).

1955 Gavinton, Gordon Moss, Retreat, Spottiswoode, Bell Wood, July 4-September 3 (A.G.L. and E. C. Pelham-Clinton).

1956 Chirnside, June 19; Aiky Wood, October 16, very abundant (A.G.L.); Pettico Wick, many at light (about 375), July 28; Gordon Moss, seven at light, September 22 (E. C. Pelham-Clinton).

1957 Gavinton, Gordon Moss, June 27-August 5.

1959 Gavinton, July 10.

1960 Gavinton, June 15-September 10.

1961 Gavinton, July 6-September 23; Birgham House, July 24 (Grace A. Elliot).

Summary.—One of our most abundant noctuids varying from black to pale forms in apparently equal proportions.

The imagines are on the wing through July, August and September (earliest record June 15, latest October 16).

*169. *Apamea hepatica* Hübn. Clouded Brindle. 351.

- 1874 Eyemouth, one pupa (W. Shaw, *H.B.N.C.*, Vol. VII, p. 235, also in *Scot. Nat.*, 1875-76, p. 9).
 1876 Eyemouth, one at sugar on banks of Ale (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
 1880 Lauder, two by J. Turnbull (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
 1927 Not common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 165).

Summary.—We have no recent records of this species which is more frequent in southern England though local and not common. It flies in late June and might still be present in the Eyemouth and Ayton district.

*170. *Apamea ypsilon*. Dismal. 354.

- 1874 Banks of R. Eye, S. Buglass was fortunate enough to sugar about half a dozen of this interesting moth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 236).
 1876 Ayton Woods, two at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
 1902 Edgarhopewood. Willows (A. Kelly in *Lauder and Lauderdale*, p. 307).
 1927 Seems very partially distributed but is sometimes abundant where it occurs. Shaw and Buglass found it fairly plentifully at Eyemouth and Ayton. Larvæ occur behind loose bark on trunks of willow trees (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 179).

Summary.—Although we have no recent records of this species in the county I have little doubt that it is probably still with us. Apparently the best way to obtain it is to search for the larvæ under the bark of old willows or among debris around the trunk during May. The imagines come to sugar in July.

BOTANY.

Notes compiled by A. G. LONG.

During the visit of the Botanical Society of the British Isles (August 1960) the following species of Eyebrights were collected by various members. These were all determined by P. F. Yeo an authority on the genus *Euphrasia*.

1. *Euphrasia micrantha* Reichb. Near Dirrington Gt. Law, coll. E. B. Bangerter, Grid Sq., 36/65. Near Penmanshiel Moor, roadside, coll. L. W. Frost, 36/832678. Lamberton Moor, coll. E. Biggar, 36/956582.
2. *Euphrasia micrantha* X *nemorosa*. Penmanshiel Moor, coll. L. W. Frost, 36/834678.
3. *Euphrasia scottica* Wettst. Above Byrecleugh in little flush on left bank of River Dye, coll. F. H. Perring and A. G. Long, 36/61-58-.
4. *Euphrasia nemorosa* (Pers.) Wallr. Drakemire and Abbey St. Bathans, coll. F. H. Perring, 36/79-62-. Gordon Moss, coll. C. Curle, 36/64. Chirnside Mill, coll. R. C. L. Howitt, 36/85. Lylestowe, coll. R. C. L. Howitt, 36/55. Threeburnford near roadside, coll. G. A. Swan, 36/472523.
5. *Euphrasia confusa* Pugsf. Roadside east of Kettleshiel, coll. G. A. Swan, 36/708519. Redheugh Farm, on grassy cliff slopes, coll. J. and P. Hall, 36/822705. Aikyside Wood, coll. F. H. Perring, 36/79-60-. Bank of Headshaw Burn, coll. G. A. Swan, 36/478566. Above Everett Moss, coll. J. and P. Hall, 36/592443.
6. *Euphrasia brevipila* Burnst and Greml. Roadside east of Kettleshiel, coll. G. A. Swan, 36/708519. Near Grants-house, roadside verge, coll. J. and P. Hall 36/813646. Foul Burn near Bridge, coll. G. A. Swan, 36/719518. Dronshiell Bridge, coll. F. H. Perring, 36/70-56-. Near Westruther, coll. E. B. Bangerter, 36/659507. Cliff between Coldingham and Linkim, coll. L. W. Frost, 36/93. Fleurs Dean, coll. C. Curle, 36/924655.

7. *Euphrasia brevipila* X *confusa*. Fleurs Dean, on rocky slope, coll. D. Dupree, 36/923653.

Mibora minima (L.) Desv. While searching for fossil plants I came on this rare grass (Early Sand Grass) growing on the north face of the sand dunes overlooking the foreshore between Weak Law and Eyebroughty near Gullane (East Lothian) in May 1961. Specimens were submitted to F. H. Perring (Cambridge) and C. E. Hubbard (Kew) for confirmation. The grass has not been found growing in Scotland for about 100 years.

Pentaglottis officinalis L. Roadside, Stony Muir, probably a garden escape (I. McWhan), May 29.

Vicia sativa L. Roadside near Tower Bridge, June 3.

Hesperis matronalis L. Above Blanterne Bridge on shingle, right bank of Whitadder, June 4.

Pedicularis palustris L. Abundant on Everett Moss, June 17 ; also on Hule Moss near junction of two burns from two lakes.

Selaginella selaginoides (L.) Link. Greenlaw Moor, in sheep drains north of main road and just west of Flourishwalls Burn, September 2.

Anthyllis vulneraria L. On old red sandstone scaur opposite Cockburnmill, also near Edrom opposite West Blanterne on left bank of Whitadder, July 16, also below Preston Bridge, October 14.

Ballota nigra L. Near Birgham House, July 29.

Genista tinctoria L. } Birgham Wood, July 29.
Salix repens L. }

Lepidium latifolium L. Below Gin Head, East Lothian, August 1.

Daucus carota L. On shingle near Cumledge, right bank of Whitadder opposite Paradise, October 14.

Blackstonia perfoliata (L.) Huds. Found by S. McNeill on sea cliffs just north of Berwick-on-Tweed.

ORNITHOLOGY.

Observations during 1961 by F. BRADY, M.Sc., Lieut.-Colonel W. M. LOGAN HOME, M.B.O.U., A. G. LONG, M.Sc., D. G. LONG, S. J. CLARKE, W. MURRAY and Miss D. C. PAPE.

Collared Dove. The most interesting bird note for the year 1961 in Berwickshire was the appearance for the first time of Collared Doves (*Streptopelia decaocto*). Four were seen at Silverwells on various dates in May and June and two birds attempted to breed at a nursery in Coldingham but the two eggs disappeared. A colony of about ten occurred on a farm at Cockburnspath and remained until October 21 but those at Silverwells left about June 15. These are the first records of the occurrence and breeding of this species in Berwickshire (W.M.L.H.).

Bewick's Swan. On February 4 in the Tweed estuary at Yarrow three adults and three first winter birds were feeding on short grass after scraping off two inches of snow. On December 26 on the Tweed at Paxton there were six adults with a party of twelve Whoopers (F.B.).

Waxwings. About a dozen birds were seen in a garden at Cornhill Road, Tweedmouth in early December (F.B.). Others were reported from a garden in Chirnside in November.

Pied Wagtails. A gathering of up to twenty-one birds appeared regularly in a garden at Grindon Corner about 7.45 p.m. over a period of three weeks in August. The assembling was obviously in preparation for communal roosting (D.C.P.).

Short Eared Owl. On January 12, 1962, two birds of this species were seen in combat just west of Hexpath between Greenlaw and Lauder. The time was about 11.30 a.m. and they were watched for about ten minutes sailing round on their long wings and diving at each other. Eventually one landed on the moor and the other flew off and perched on a tree about 100 yards away (D.C.P.).

- Canada Goose*. Eighteen seen at Harden's Reservoir on June 24 (D.G.L.).
- Greenshank*. One on Whitadder at Edrom, August 4, and near East Blanterne on August 12 (A.G.L.) ; one at Cumledge, August 18 (D.G.L.).
- Hen Harrier*. One female at St. Helen's Church near Pease Bay April 30 (W.M. and D.G.L.).
- Iceland Gull*. One immature bird at Watch Reservoir on August 5 (W.M. and D.G.L.).
- Peregrine Falcon*. One male at St. Abb's Head, April 30 (W.M. and D.G.L.) ; one at Pease Bay, August 14 (D.G.L.).
- Pied Flycatcher*. Bred at Paradise and Lees Cleugh, single males at Kyles Hill, Oxendean, Duns Castle Lake, Aller Burn, Borthwick Quarry (A.G.L. and D.G.L.).
- Ring Ousel*. Two flew over Gavinton in a westerly direction on July 5 (D.G.L.).
- Stonechat*. Bred at Pease Bay (one pair), and Lamberton (two pairs) also a pair seen at Burnmouth (D.G.L., S.J.C. and W.M.).
- Whooper Swan*. Fifteen flew inland from Pease Bay on November 5 (D.G.L. and S.J.C.).
- Green Sandpiper*. One on Langton Burn, August 11, and on Bell's Burn, December 9 (D.G.L. and S.J.C.).

Records for Hule Moss, Autumn, 1961 (D.G.L. and S.J.C.).

Black-necked Grebe. One, August 4-8.

Little Grebe. Two, September 23-24.

Wigeon. First on August 27.

Pintail. One male in eclipse, August 6.

Scaup. Several, September 30-November 12.

Goldeneye. First on October 21.

Goosander. Several, August 19-September 30.

Grey Lag Goose. Two on September 9, about 35 on November 4.

- Pink Footed Goose.* About 5,000 on October 21.
- Whooper Swan.* First on October 29.
- Buzzard.* Single birds seen several times and two on October 1 and 21.
- Carriion Crow.* A flock of about forty on October 28.
- Common Tern.* One, immature, on September 9.
- Curlew.* About 600 on August 22.
- Dunlin.* Seen several times, last one on October 28.
- Glaucous Gull.* One on small loch, September 24.
- Grasshopper Warbler.* One, September 2.
- Green Sandpiper.* One on August 16 and 22.
- Greenshank.* Many single birds, three on September 9.
- Hen Harrier.* One male on August 6 and September 17.
- Merlin.* One on October 28 and two December 24.
- Peregrine Falcon.* One, October 15.
- Red Footed Falcon.* A dead specimen was found underneath the observation hut by M. J. Henderson on October 15, it was sent to the Royal Scottish Museum and mounted.
- Teal.* About 100 on November 4.
- Tufted Duck.* About 48 on September 30.
- White Wagtail.* Four on September 24.

ENTOMOLOGY.

Observations during 1961 by A. G. LONG, GRACE A. ELLIOT,
Lieut.-Colonel W. M. LOGAN-HOME and S. McNEILL.

Name.	Date.	Place.	Remarks.
Mother Shipton (<i>E. mi.</i>).	13.5.61 21.5.61	Gullane Links (East Lothian). Rough field north of Kettleshiel.	Two seen flying by day, one caught. One netted by day (A.G.L.)
Small Argent and Sable (<i>E. tristata</i>)	17.6.61	Everett Moss	One netted (A.G.L.)
Grey Scalloped Bar (<i>D. fagaria</i>)	6.7.61	Gavinton	One in m.v. trap (A.G.L.)
Barred Rivulet (<i>P. bifasciata</i> Haw)	19.7.61	Gavinton	One in m.v. trap (A.G.L.)
Swallow Tailed Moth (<i>O. sambucaria</i>)	22.7.61 11-14.7.61 21.7.61	Gavinton Paxton Birgham	One in m.v. trap (A.G.L.) Three (S.McN.) Two (G.A.E.)
Pebble Hook-Tip (<i>D. falcataria</i>)	29.7.61	Birgham Wood	One larva beaten from birch (A.G.L.)
Valerian Pug (<i>E. valerianata</i>)	2.8.61	Edrom (right bank of Whitadder)	Three, among Butterbur (A.G.L.)
Blood Vein (<i>C. amata</i>)	12.8.61	Gavinton	One in m.v. trap (second Berwickshire record) (A.G.L.)
Red Admiral (<i>V. atalanta</i>)	9.9.61	Gavinton	One larva fully grown (A.G.L.)
Large Marbled Tortrix (<i>N. revayana</i>)	23.9.61	Gavinton	One in m.v. trap (second Berwickshire record) (A.G.L.)
Silver Y. (<i>P. gamma</i>)	5.10.61	Duns	One pupa on rose leaf imago emerged on 7th October (A.G.L.)
Peacock (<i>V. io</i>)	27.9.61	Edrom House	One on extracted honey- combs (W.M.L.-H.)

Name.	Date.	Place.	Remarks.
Pale Prominent (<i>P. palpina</i>)		Paxton Dean	One emerged from a pupa found under a poplar (S.McN.)
Dusky Lemon Sallow (<i>C. gilvago</i>)	23.9.61 1.9.61	Paxton Birgham	One (S.McN.) One (G.A.E.)
Muslin Ermine (<i>C. mendica</i>)	17.4.61 1.5.61	Birgham	Two (G.A.E.)
Powdered Quaker (<i>O. gracilis</i>)	17.4.61 20.4.61	Birgham	Three (G.A.E.)
Chamomile Shark (<i>C. chamomillae</i>)	1.5.61	Birgham	One—rare (G.A.E.)
Common Shark (<i>C. umbratica</i>)	21.7.61	Birgham	One (G.A.E.)
Dark Spectacle (<i>A. triplasia</i>)	30.6.61	Birgham	A few (G.A.E.)
Twin-spot Carpet (<i>C. didymata</i>)	4.8.61	Stonefold	Reared from larvae on <i>Lamium album</i> (G.A.E.)
Single Dotted Wave (<i>S. dimidiata</i>)	12.8.61	Birgham	One (G.A.E.)
Red-line Quaker (<i>A. lota</i>)	18.9.61	Birgham	One reared from larva found on May 31 on Golden Willow (G.A.E.)
Red Carpet (<i>X. munitata</i>)	29.8.61	Birgham	One (G.A.E.)
Death's Head Hawk (<i>A. atropus</i>)	21.9.61	Longridge	One (G.A.E.)

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1961.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.		Days with Temperature at or below 32°.						Bright Sunshine.				
	Maximum.			Minimum.			Hrs.	Days with Sun.	Hrs.	Days with Sun.	Hrs.	Days with Sun.	
January	47	49	47	49	46	49	17	19	20	30	15	44.8	17
February	51	55	51	55	49	54	24	10	22	60	20	79.6	22
March	55	60	57	61	59	61	30	4	30	81	28	118.3	30
April	60	62	61	67	64	62	21	7	29	74	19	96.5	19
May	67	64	66	71	70	68	30	4	2	120	26	160.3	30
June	69	72	74	78	76	72	33	0	2	131	30	145.3	29
July	69	75	68	75	71	70	31	1	27	145	28	118.4	23
August	77	79	78	82	78	80	35	0	29	141	29	143.0	29
September	70	68	74	70	75	78	35	0	27	93	24	112.3	29
October	64	63	62	60	64	62	31	4	28	80	25	92.8	28
November	54	55	54	54	55	58	22	13	9	68	23	67.1	23
December	50	50	50	49	51	53	11	23	21	36	17	46.0	18
Year	77	79	78	74	78	78	4	85	305	1039	284	1224.4	297

RAINFALL IN BERWICKSHIRE DURING 1961.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level -	St. Abb's Head.	Tweed Hill.	Whitchester.	Duns Castle.	Manderston.	Kimmerghame	Swinton House	Lochton.	Marchmont.	Cowdenknowes.	Lauder.	Dura- tion.*	Swinton House.	Hours
		245'	50'	838'	500'	353'	300'	200'	150'	498'	300'				
<i>Month</i>															
January	-	2.55	3.22	3.91	2.94	3.48	3.10	3.08	3.25	3.22	3.13	3.78	85.3		
February	-	1.17	1.37	1.83	1.66	1.74	1.85	1.55	1.87	2.02	2.58	2.10	31.0		
March	-	.80	.85	1.30	.93	.88	.70	.86	.83	.96	1.26	1.06	15.1		
April	-	2.55	2.56	2.90	2.67	3.29	3.01	2.42	2.17	2.44	2.99	2.70	53.7		
May	-	.99	1.09	1.23	.96	1.15	.95	.75	.98	.95	1.09	1.04	19.4		
June	-	.80	2.10	1.09	.99	1.12	.22	1.17	1.38	.90	1.15	1.19	27.1		
July	-	1.55	2.32	2.27	1.46	2.40	2.07	2.07	2.00	2.34	3.42	3.22	26.3		
August	-	2.50	3.21	3.78	3.00	3.38	2.68	2.44	2.32	3.62	4.49	4.22	33.2		
September	-	1.57	1.92	2.42	2.01	2.41	2.00	1.80	1.68	2.45	1.77	2.19	27.9		
October	-	2.67	2.84	3.99	2.93	2.91	2.91	2.49	2.16	2.88	3.30	4.09	58.4		
November	-	1.03	1.45	2.38	1.81	2.03	1.58	1.73	1.48	2.02	2.03	2.37	32.1		
December	-	1.85	2.58	3.28	1.90	2.86	2.82	2.47	1.87	.67	2.80	2.80	45.6		
Year	-	20.03	25.51	30.38	23.26	27.65	23.89	22.83	21.99	26.47	30.01	30.76	455.1		

* Number of hours for which rain fell at a rate of .004 inches or more.

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1961.

INCOME			EXPENDITURE		
<i>Credit Balance at September 20th 1960</i>			History for 1960 (Martins) ...	...	£257 18 6
<i>Subscriptions—</i>			<i>Printing and Stationery—</i>		
Annual ...	...	£407 5 0	Printing Notices (Martins) ...	£67 16 1	
Junior ...	...	2 0 0	Stationery (Martins) ...	11 13 2	
Entrance Fees ...	...	15 10 0			
Arrears ...	...	15 0 0	<i>Sundry Expenses—</i>		79 9 3
			Set of B.N.C. Histories (Steedman)	10 10 0	
		439 15 0	Presentation to Mr. A. A. Buist ...	15 2 6	
<i>Sale of Club Badges</i> ...	...	...	Badges ...	21 12 0	
	...	5 6 0	Insurance Premium ...	2 2 0	
<i>Sale of Histories per Librarian</i> ...	...	12 9 9	Rent of Books in Library ...	1 0 0	
	...	...	Bank Charges and Cheque Book ...	18 6	51 5 0
			<i>Subscriptions—</i>		
			Assoc. Preservation Rural Scotland	1 1 0	
			Council of British Archaeology ...	2 0 0	
			Chillingham Wild Cattle ...	1 1 0	
			British Association ...	2 2 0	6 4 0
			<i>Expenses—</i>		
			Secretary ...	36 14 3	
			Ed. Secretary ...	1 5 0	
			Treasurer ...	9 17 8	
			Delegate to British Association ...	10 0 0	57 16 11
			Credit Balance at Bank, September 20th 1961	...	106 11 7
					<u>£559 5 3</u>

BALANCE SHEET.

<i>LIABILITIES</i>			<i>ASSETS</i>		
Carried from General Account	...	...	£106 11 7	Cash in Bank	...
Investment Account	...	...	...	National Commercial Bank	...
Balance at 20/9/60	...	£192 6 10	...	Trustee Savings Bank	...
Interest added	...	3 13 1	195 19 11		...
			<u>£302 11 6</u>		<u>£106 11 7</u>
					<u>195 19 11</u>
					<u>£302 11 6</u>

FLODDEN FIELD MEMORIAL FUND.

Balance at 20/9/60	...	£48 2 7			
Interest added	...	1 6 0	49 8 7		
			<u>£49 8 7</u>		
			Cash in Bank	...	...
			
				...	£49 8 7
					<u>£49 8 7</u>

Berwick-on-Tweed, 7th October, 1961. Audited and found correct.

(Signed) P. G. GEGGIE, Hon. Auditor.

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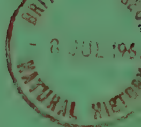
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HISTORY
OF THE
BERWICKSHIRE
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PROCEEDINGS

OF THE

BERWICKSHIRE NATURALISTS' CLUB

CHURCH EXTENSION IN BERWICKSHIRE THROUGH THE AGES

Address delivered to the Berwickshire Naturalists' Club at Berwick, 10th October, 1962, by the Rev. J. I. Crawford Finnie.

Before one builds a place of worship it is usual to have a group of worshippers.

How then did the Christian religion come to be introduced into this area?

Anyone who endeavours to delve into the history of the first beginnings of Christianity whether North or South of the Tweed soon finds himself befogged in a realm of legend and pious imaginings.

Church historians appear to be imbued with the idea of proving that their particular branch of the Church owed its beginning to the Apostles if possible and that it was entirely independent of any other church.

It is said that no less than six of the Apostles have been named as possible founders of the Church in England and by the aid of legend Joseph of Arimathea has been transported from the Holy Land to "England's green and pleasant land" there to deposit the Holy Grail and plant the Holy Thorn at Glastonbury. Even the Venerable Bede who dwelt in the cold matter-of-fact atmosphere of our northern regions and not in the more heady atmosphere of the warm south adds to

the legends by repeating a tale of a certain Lucius, King of Britain, who in A.D. 156 sent a letter to Pope Eleutherius "asking to be made a Christian. This pious request was quickly granted, and the Britons held the Faith which they had received in all its purity and fullness until the time of the Emperor Diocletian." Eleutherius was not Pope until 20 years later and Lucius was king not of Britain but of Edessa in Mesopotamia and his capital was named "Britium" which some scribe had possibly confused with "Britannia".

North of the Border the church historians were equally active in this field of legend. When the Scots had trouble with the Archbishop of York who claimed jurisdiction over the Church in Scotland, the Scottish Churchmen produced the legend which explained why Andrew, the brother of Peter, became the patron saint of Scotland. The story was that Regulus one of the men who were in charge of the tomb of St. Andrew at Constantinople had a dream, in which he received a divine command to go forth to another land. The words were exactly the same as those in which the call of Abraham is described—"Depart from thine own land, thy kindred and thy house, and go into the land which I shall show thee".

Regulus in obedience to the call took with him some relics of the Apostle and set forth with some companions. Eventually they landed at the place now called St. Andrews. To add to the impressiveness of the story a Scottish King, Angus, whose actual dates were many centuries later, was called into being. This Angus, very conveniently, had a vision of a white cross on a blue sky and heard the voice of St. Andrew assure him of victory in battle.

In gratitude for blessings received Angus was naturally eager to make a thank offering to the Apostle. Then he fell in with Regulus who had just completed his long and perilous voyage and was directed to bestow the land required for the building of the mother church of all Scotland upon St. Andrew.

It was Andrew who brought Peter to the Lord, therefore it was felt that the Pope as the successor of Peter could not

fail to be impressed by this proof of the Apostle Andrews' interest in the Scottish Church. The reaction at Rome was not as immediate as the Scots had hoped but a later Pope did decree that the Scottish church was the special daughter of Rome and thus put an end to the claims of the English Archbishop to exercise authority in Scotland.

There is no convincing proof that Christianity came to this district from the Apostles nor even direct from Rome. Christianity came to Berwickshire from Old Melrose and Lindisfarne, both of which were outposts of the Church of St. Columba in Iona. The Columban Church was an offshoot of the Irish Church and there appears to be some slight evidence that the Irish Church received Christianity from the Church of Gaul, which in turn received it from the Eastern Church by way of North Italy.

The Columban Church was monastic and not parochial in its organisation therefore we cannot imagine a great wave of missionary activity sweeping across Berwickshire leaving the country neatly divided into parishes, each with its parish church.

Each monastery of the Columban Church was a centre of missionary activity. At the head of the monastery was the abbot and in Iona, following the precedent which was set there by St. Columba—who was a presbyter only, and not a bishop—the abbot, as Bede tells us, was always a presbyter, but this was not followed in all monasteries as we find bishops also acting as abbots at Lindisfarne.

The abbot was “father” of the community over which he ruled. The community was called the “family”. The abbot usually officiated at the altar and dispensed the sacraments, he summoned the brethren to church, he instituted festivals, regulated fasts, and prescribed penance and sent the monks out on their various missions and also administered the property belonging to the monastery. The rule of the abbot was absolute and must be complied with, even at the risk of life itself.

It has been said of the Columban Church—"as an instrument for missionary conquest it proved an unparalleled success ; but it lacked the power necessary to conserve what it won ; and it failed before the effort of building up a stable and enduring ecclesiastical fabric ".

No known remains of a building of this period in the county, but a study of the buildings to be found in Ireland and in the Hebridean islands indicates that a Columban monastery consisted of a collection of huts made of branches or wattles covered with turf or clay. The churches were also constructed of wood. These wooden churches continued to be built until 12th century and although stone churches existed they were considered to be a novelty.

Each monastery was surrounded by a high wall or cashel of great thickness constructed of unhewn stones and earth. Sometimes chambers were constructed in the thickness of the wall. More permanent structures of stone in the form of beehive shaped cells made of dry stone work were the cells of the monks, while the churches were somewhat similar but rectangular in plan and having the joints of the stones cemented with a certain amount of mortar. The roofs were like those of the huts, constructed of overlapping stones carried up with a curve to a pointed ridge. The church was a simple oblong chamber of small dimensions set with its length east and west.

A small door in the west end had inclined jambs and a straight lintel and interior was lighted by a small square-headed window to the east.

Claims have been made that St. Ebba's Chapel on St. Abbs' Head dates from this period but the size and plan of the building suggest that it belongs to a much later period.

The sites for the first parish churches in Berwickshire would be chosen in the 12th century as a result of the changes which Queen Margaret wife of Malcolm Canmore made in the organisation of the Scottish Church. As the result of her influence and that of her sons the monastic system of the

Celtic church was replaced by a diocesan system akin to that of the Western church. Grants of land were made to settlers from England and elsewhere, who agreed to provide men for the army of the king. These settlers would build a timber castle for their own use and usually a church. The grant of Ednam by King Edgar to Thor Longus in 1105 is the earliest of these grants to be recorded.

Since most of these settlers came from England or the Continent it is not surprising that the style of architecture in which they chose to build their churches was that to be found in the places from which they came, viz., Norman. These buildings would consist of an oblong nave opening by an arch into a nearly square chancel, as for instance at Legerwood where the Norman chancel still survives attached to a modern nave.

In more elaborate buildings the square east end of the chancel would be replaced by an apse as at Bunkle and Edrom.

The fact that such buildings could be constructed and decorated in characteristic Norman fashion is evidence that skilled stonemasons were available when the money was forthcoming with which to pay them.

At a later date when most of the parish churches had passed under the control of the monasteries the typical parish church became a long narrow building with little or no ornamentation, often rudely constructed and roofed with thatch or turf. The reason for such poor buildings was not lack of skill but lack of money, since there is ample evidence to be found in various documents that the monasteries robbed the parish churches in order to add to their own wealth and grandeur.

Such a simple oblong building would be similar to the church at Bassendean. This building appears to be very ancient as it possesses recesses for the holy water stoup, an ambry and a piscina in the appropriate places. The fact that grooves for glass are in the wall of one of the windows would indicate that it is of a later date. It was in use prior to 1649 when

owing to a movement of the population, a new church was built at Westruther. This latter church was altered in 1752 to accommodate another change in population and was in turn abandoned for another new church in 1840.

Long narrow buildings were common because the native grown timber was not long enough to span a wide roof. Cockburnspath Church is an example of this type being 80 feet long by 18 feet wide. The remains of a window with Geometrical tracery and the thickness of the walls suggest that it was built in 16th century. The round tower at the west end might suggest a very early date as round towers are found in Ireland dating from 9th-12th centuries and at Abernethy and Brechin in Scotland. They were strongly built as places of refuge for the monks in a monastery, but the tower at Cockburnspath has too thin walls and is probably not much older than the church. It may have been intended as a belfry or a watch tower.

Greenlaw Church was originally a long narrow building built in 1675 to which a tower was added in 1696. An increase in population necessitated the addition of a north aisle in 1855. The addition of the north aisle gave to the church the T-shape which is to be found in so many Scottish parish churches.

This T-shape was first introduced shortly after the Reformation when owing to the increasing numbers attending the services the long narrow Pre-Reformation Churches proved too small and unsuitable for the services of the Reformed Church. In England the development of the wool trade in 14th and 15th centuries brought new wealth to the country and some of this was used to enlarge and largely rebuild many of the churches in order to accommodate many altars. In Scotland there was no such increase of wealth with the result that most parish churches retained the simple long narrow oblong form which was determined by the outline of the first church on the site which often dated from 12th century. Even when the later church was built on

another site the long narrow shape was often continued. At Westruther the 1649 church was essentially a copy of its Pre-Reformation predecessor at Bassendean with a north aisle added to give it the new fashionable T-shape to accommodate more worshippers. There was a curious reversal here to the original shape when because of a decrease in population the north aisle was removed in 1752.

Swinton Church, which was built in 1729, on earlier foundations, is an example of the old pattern persisting. To this long narrow oblong the north aisle was added in 1782 and converted it to the T-shape.

In this church is a modern example of the laird's loft which occupies the east end of the original narrow building. It became the custom, after the Reformation, for the chief landowner in a parish to appropriate to himself and his family, the chancel of the Pre-Reformation Church and to build a loft or gallery. The part underneath the loft might be used as a retiring room or as a place of burial.

Polwarth Church, built in 1703, possibly on older foundations, has a retiring room for the laird in the tower. This room is provided with a fireplace and also a squint through which the laird can watch the progress of the service and decide whether the sermon is sufficiently interesting to warrant his attention. This church was built by Sir Patrick Hume, later the first Earl of Marchmont.

There was not much church building in the early part of 18th century as the union with England in 1807 had unhappy financial repercussions and there was a certain stagnation in national life as a result. In the second half of the century improvements in agriculture introduced by many of the landowners led to an increase in the rural population and this necessitated larger churches. The upkeep of church and manse was the responsibility of the heritors or landowners of the parish. These often proved reluctant to disburse money for this purpose with the result that many legal battles

aged between ministers and heritors in an attempt to force the heritors to fulfil their legal obligations. The parish church has suffered from a lack of money for repairs and re-building at different periods. In mediaeval days the monasteries allowed the parish churches which were under their control to fall into disrepair in spite of appeals and commands from the church authorities. In post-Reformation days the heritors were the culprits.

The heritors were obliged to provide sufficient seats to accommodate all the adults in the parish and this they tended to do in the cheapest way. Where it was found to be slightly less costly to build a new church instead of repairing and enlarging an old one, the old one was abandoned and replaced by a new building. The T-shape which had been found most suitable for worship under both Episcopalian and Presbyterian regimes in the 17th century was usually retained with galleries built across the three ends of the T. The T-shape provided space for the long Communion Table which stretched the whole length of the church. The south facade as at Polwarth contained three doors, one at each end, and one in the middle for the minister. The minister's door usually led straight into the pulpit which was situated in the middle of the long south wall and commanded a view of the whole church.

It was the custom at this period for communicants to partake of the elements seated round the Communion Table following the example of our Lord and His Disciples at the Last Supper. Large numbers from surrounding parishes attended the Communion Season and this made necessary the serving of many Tables. The communicants would file into the church and take their seats at the Table during the singing of a psalm, then after partaking they would file out of the other door while others came in to take their places during the singing of another psalm.

The T-shape of church proved itself so suitable both visually and acoustically that it was retained even when one might have expected otherwise. Ladykirk which is a cruci-

form church built in 1500 by James IV has its internal furnishings so arranged that it conforms to the T-shape. This is done by ignoring the south transept. Somewhat similar internal arrangements persisted in Coldingham Priory until recently. Modern examples of the use of this T-shape are St. Cuthbert's Church, Coldstream and Ayton Church. Externally Ayton Church would appear to be a modern Gothic edifice with nave, chancel with apsidal east end, and one transept with tower and spire, however, internally it proves to be the familiar T-shape.

Most of the churches in the country which had an ancient foundation were long narrow buildings whose width was governed by the length of timber then available but by the 18th century the importation of timber from the Baltic ports made possible the construction of wider roofs. This was taken advantage of at Eccles where in 1774 the old narrow foundations were abandoned and a new church, a wide oblong in plan, was built. The seating arrangements were simply a modification of the old T-shape, with the pulpit in the middle of the south wall, (with its own private doorway) and galleries on the east, west and north walls.

Church extension in Berwickshire appears to have taken place in several phases :—

1. That of 7th century under the influence of St. Cuthbert and his companions from Melrose.
2. That of 12th century under the influence of Queen Margaret and her sons.
3. That of 18th century made necessary by the increase in rural population due to improvements in agriculture.
4. That of 19th century due to the Disruption of the Scottish Church in 1843 which led to buildings of the Free Church of Scotland being erected in every parish.

Reports of Meetings for the Year 1962

The secretary wishes to thank the members of the Club for all the help and consideration that they have afforded him in the past season. The Meetings have been well attended and the membership keeps at an even level. The Club is indeed grateful to the ladies and gentlemen who have so graciously opened their houses and been willing to let us see the many treasures which they contain. Opening a house to the Club causes a great deal of unseen labour and we are deeply appreciative of all the kindnesses shown.

1. The first meeting of the season was held at Peebles. About 100 members were present. St. Andrew's Church, once connected with the Covenanters, was visited. After a short drive Neidpath castle was the next visit. After a picnic luncheon in the garden of Stobo Manse, the Rev. I. Crawford Finnie gave a talk in the ancient Church recently restored. By the kindness of Mr. and Mrs. Balfour, the Club were able to walk in the gardens at Dawick, where some of the rarest trees and shrubs growing on the Borders are to be found. On returning to Peebles, tea was taken at the Tontine Hotel.

2. The second meeting took place at New Hailes. The members of the Club should indeed remember this memorable occasion, as do the President, Editing Secretary, and the Secretary. The visit was only achieved with much difficulty. This historic house, virtually unchanged since the time of Lord Hailes, is never under any circumstance open to the public. The occasion was unique in many ways. After luncheon and a short drive, Brunstane House was visited. D. Mackenzie Robertson, Esq., gave a vivid account of its history and the Scottish Parliament that sat there. Brunstane House is one of the enchanting houses that are rapidly becoming rarer owing to the development of housing and trading estates. It is hoped that when such time comes for its ultimate destruction that many of its architectural features will be removed and transferred elsewhere.

3. Perhaps the highlight of the season's meeting was the third, when the Club met at Inveresk Church. This wonderful church, built on the original site of the Roman Temple of Jupiter, is almost Cathedral-like in its structure. The

Fisherman's gallery is unique. After luncheon in the grounds of Inveresk House, now the property of the National Trust, where a new Garden is in construction, members were taken on an exciting tour of some eighteenth-century houses, all carefully restored and tended by their owners. The day will ever be remembered as being out of this world. Our many thanks are due to the friends of Inveresk Society.

4. The August meeting was held in brilliant sunshine when over 100 members met at Kirknewton Church which was described by the vicar. Later members drove to Hethpool Tower where the history was told by Major Dixon-Johnson. The nearby stone circle was visited and described by Captain Walton. After a steep but short climb the camp of Elsdon Burn was seen, and a wonderful view was had over the Borderland. This was the first visit of the Club to this large and remarkably sited camp.

5. The last meeting was held at St. Boswells where the Company assembled at the seminary of the White Friars. The work of the school and its pupils was explained by the Abbot in charge. Later, members were shown over the building. A visit was next paid to two relatively unknown monuments, the Wallace Memorial, and the James Thompson Temple, both erected by the Earl of Buchan. After luncheon, the party drove to Mertoun House and were received by their Graces The Duke and Duchess of Sutherland. This fine Bruce House had recently been restored to its original form and contains the famous collection of the Bridgewater Paintings. Members were able to wander at their leisure through the house and gardens. Tea was taken at the Buccleugh Arms Hotel.

SIR JOHN HEBURN MILNE HOME.

The Club has lost an old and valued Member who at the time of his death was "the father of the club." Joining in 1898, Sir John was one of the interested members, and ever had the welfare of the Club at heart. Those who knew him will ever remember his gentle other worldly nature, his great knowledge of Border history, lore and legend, and his quiet sense of fun. Nothing was ever a trouble to Sir John and he

would go to endless pains to be of help. Of one of the most illustrious of Border families, Sir John was educated privately, and afterwards fulfilled a life of public service, devoted to duty and his country. His passing is deeply regretted not only by his many friends but by the community at large.

CHARLES HENRY HUNTER-BLAIR,
M.A., D.Litt., D.Hist., F.S.A., F.R.C.Heralds.

It is with sincere regret that we must report the passing of this famous historian only a short space of time before his hundredth year. The Club and the country have lost one of their most learned and erudite men. His long life was one devoted to heraldry, history and literature. Born in 1864 he was descended from Robert Blair of Doon, who in the seventeenth century was a well known antiquarian. In the eighteenth century the Blairs married into the Hunter family and have since been Hunter Blairs. Dr. Hunter Blair was educated at Tynemouth school and afterwards joined the firm of Dixon Blair of Newcastle where he was managing director until shortly before his death. In 1918 he joined the Berwickshire Naturalists' Club. Already he was well known throughout the country as an authority on heraldry and ancient seals, and an account of the mediaeval seals of Berwick-upon-Tweed appeared shortly after his becoming a member. Dr. Hunter Blair was a most active member and supporter of the Club and in 1929 was elected President. Since then he has been rewarded by many honours, and has contributed many times to the History. He was consulted by many eminent people and societies throughout the world for he was considered to be one of the greatest authorities on heraldry in the country. He was ever willing to help the student and the researcher; never impatient and always emanating an old world charm and culture. Many of us have reason to remember him with gratitude for his great knowledge and understanding. Dr. Hunter Blair was president of the Newcastle Society of Antiquaries and was for forty years the Editor of the Society's publication *Archaeologia Aeliana*.

Our sympathy goes out to his sons and daughter who have lost a father, as the Club has lost a friend.

Treasurer's Report—1962.

Mr. President and Fellow Members I have pleasure in submitting Treasurer's Financial Statement for year ending 20th September, 1962.

I have to report a loss on the Season of £80 5s. 8d. This was caused by the increased cost of printing the History for 1961. I will explain reasons for this later.

Income from subscriptions, entrance fees, etc., for the year amount to £435 18s. 0d.; expenditure for the year amounts to £516 3s. 8d.; showing a loss of £80 5s. 8d.

The details of income are as follows, sub, etc., a total of £435 18s. 0d.

The Details of Expenditure are History, printing, etc., making a total of £516 3s. 8d.

The Credit Balance on General Account at commencement of season was £106 11s. 7d., deduct loss, £80 5s. 8d.

Credit Balance on General Account at end of season is £26 5s. 11d.

The Club's Reserve Account with the Trustee Savings Bank amounts to £200 17s. 5d.

The Balance Sheet shows cash in National Commercial Bank £26 5s. 11d., and in Trustee Savings Bank £200 17s. 5d., a total of £227 3s. 4d.

Flodden Field Memorial Fund

Flodden Field Memorial Fund as brought forward from September 20th, 1961, £49 8s. 7d., plus Interest of £1 10s. 2d., giving a total of £50 18s. 9d.

With reference to cost of History £375. This is a large sum, but this History will be approximately half as large again as the last one. The Editing Secretary found himself in the position that he had much more material for publication than the Club could afford to print. The Editing Secretary, the Printers and I met and we decided to use about £80 of the carry forward from last year towards cost of this History and I hope you will approve our action when you receive your copies. I would sincerely apologise to those members who sent in articles for publication which, owing to the financial

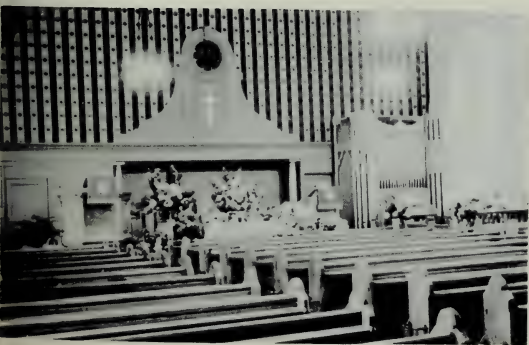
position, either had to be omitted or cut down. I think it is the Editing Secretary's intention to include those in next year's History.

Finally I would state that the Club's accounts have been audited by Mr. P. G. Geggie of the National Commercial Bank and I would take this opportunity of thanking him for his kindness in doing so.



Ayton Church.

Edrom—Norman
Apse.



Eccles Church—
interior.

Swinton Church—
Laird's loft at east
end.



Westruther Church
—1840.

Bonkle—Norman
Apse.





Ladykirk Church.



Greenlaw Church.



Westruther Church
—1649 altered 1752.



Coldingham Priory.

Legerwood Church
—Norman Arch.



Bassendean Church.

ST. ANDREW'S CHURCH, PEEBLES.

By REV. J. I. C. FINNIE.

King David II, in 1363, granted John of Peblys, Master of St. Leonard's Hospital and vicar of church of Peblys, space on the common ground of the burgh on which to build a church. Blessed Virgin Mary of Childbirth.

In 1367 King David endowed it with the multures of the mills Traquair and Innerleithen.

So it remained till 1406.

In 1195 a church in the town was dedicated to St. Andrew the Apostle by Bishop Joceline of Glasgow. This served as the parish church until it was destroyed by fire in 1406 when the town was burned by Sir Robert Umphraville. An image of St. Andrew was saved from the fire and brought here to the Church of St. Mary and installed in the choir. This church was then adopted as the parish church and became known as St. Andrew's.

This St. Andrew's Church was burned along with the town by the English in 1548-9. Although the Town Council strove to get it rebuilt and its services restored they were only partially successful. But in 1560 they obtained possession of the Cross Church from Red Friars or Trinitarian through the influence of the Lord's of Secret Council. The Cross Church served as the Parish Church from 1560 until 1784.

The tower has been so thoroughly restored that it probably bears little resemblance to its original form. Dr. Chambers "more honour to him had he been less successful in concealing the old work" Church 140 feet long.

Cromwell's troops stabled their horses in the church when, it says, Sir Herbert Maxwell laid seige to Needpath Castle in 1650.

Tombstones.

Oldest. John Tweedie, baillie, died 1699; and his son, provost, died 1712.

From this family have sprung Speirs of Elderslie. Round sides of the stones, figures representing the four seasons— a farmer sowing—Spring.

— woman with flowers in her hand—Summer.

— young man with reaping hook—Autumn.

— boy blowing on his hands—Winter.

THOMAS HOPE.

Here lie three Hopes enclosed within,
Death's prisoners by Adam's sin;
Yet rest in hope that they shall be
Set by the second Adam free.

LYNE CHURCH.

By REV. J. I. C. FINNIE.

Built 1644, replacing a former church said to have been built by Sir Thomas Randolph, nephew of Robert the Bruce, who had a house inside the remains of the Roman Camp behind the church. Camp known locally as Randolph Wa's. Foundations of buildings discovered in excavations in 1900 may have been those of Randolph's house.

Church said to be built on a Roman tumulus. Pulpit and pew—fine carving from Holland—were presented to the church in 1644 by Lady Yester.

Pews—originally one—show a monogram with the initials J.M.H. for Lord John and Lady Margaret Hay of Yester.

STOBO CHURCH.

By REV. JAMES BULLOCH, B.D., Ph.D.

Stobo kirk is substantially a Norman parish church with late fifteenth century additions and alterations made in the Victorian reconstruction of 1863 and the rebuilding of the north aisle in 1929. As such, it is unique in the upper Tweed valley. The causes for this are found in its early importance as the seat of the deanery, its mediaeval associations with Glasgow as an estate of the bishops and the endowment of a canonry, and the care and interest of local lairds in the last century.

Dedicated to St. Mungo—otherwise St. Kentigern—Stobo had a group of dependent chapels which later became the parishes of Lyne, Dawyck, Drumelzier, and Broughton and until the sheriffdom was established at Peebles in the early twelfth century, it was the seat of the deanery. Known as a plebania, this type of church grouping perpetuated the pattern of early missionary settlement, and there is good cause to hold that the church owes its foundation to Kentigern or his time.

In the enquiry of Earl David, held about 1120, Stobo is listed as one of the ancient possessions of the bishopric of Glasgow. The Norman work of the building evidently dates from soon after.

Entering the church at the porch there can be seen the jugs—for civil punishment—in a glass case, while on the right are the heavy scores made by the sharpening of knives. Within the porch is the Norman south doorway, its modern door being of cedar of Lebanon, carefully repaired where the planing of the wood revealed internal flaws.

Opposite the door, in the north wall of the nave, is a window which has originally been a doorway. While the position is quite unusual its character was made plain in 1863 by the discovery of the long bolt hole, now concealed, for a sliding bar. It is of Norman date, but the windows on the south side are

later. The small one under the gallery dates only from 1863 ; the two larger were formed in the mid fifteenth century, but one was completely replaced in 1863 and the other partially. A large archway in the west wall was filled up in 1863 to create a vestry and a stair to the laird's loft. To the east the chancel arch, which was small and low, was most unfortunately replaced by the existing one in 1863.

Two screens ran across the chancel in mediaeval times, one at the chancel arch and the other to the eastward. A small window (behind the organ) lit between the screens, a doorway in the south wall gave separate access to the chancel beyond the second screen, and the large south window was thus centrally placed in the remaining chancel. This doorway was raised in 1863 by the insertion of a stone on each side. A Celtic cross head was found above the opening and was removed by someone who gave the modern replica seen standing in the wall tomb opposite.

Three Norman windows evidently existed in the north wall of the chancel ; the westmost has been destroyed, but the two others remain. On the south side a large window with heavy plate tracery was inserted in the fifteenth century when glass was more readily available. On its sill lie several stones found in reconstruction of the kirk ; to the east a skew putt from a gable end, next a stone from above the north aisle showing chalice and wafer, sacramental symbols for a priest ; a niche for a small statue ; the capital of a Norman wall shaft, as at the door ; and a voussoir, or stone from a window frame. East of the window is an aumbry, popularly but inaccurately described as a leper squint. In the north wall is a wall tomb, lifted about half a yard in 1863 and moved some yards west of its original site. Probably it also served as an Easter Sepulchre. The slab was missing at the time of reconstruction. Some of the stones in the arch have been misplaced in re-erection. Almost every one carries a mason's mark. Above it is a coat of arms, much defaced, but corresponding to that for the family of Vesey.

The alms dish is of Nuremberg work and the candlesticks are Flemish. Six of the lamps are of late mediaeval date (three in the chancel, two at the crossing, and one at the west end)

and the remainder are copies ; two, one at the south chancel window and the other at the west end of the nave, retain the original chains ; all contain Victorian fittings. A sanctuary lamp is awaiting repair. The bevel on the east wall of the chancel indicates that in mediaeval times the chancel had a plaster ceiling, and the small window under the roof has lit the loft.

The north aisle was attractively reconstructed in 1929 under the mistaken impression that it was St. Kentigern's cell. It is almost certainly a chantry chapel or mortuary aisle of late fifteenth century date. In its west wall can be seen the broken piscina beside which the altar once stood. Alongside the piscina is a burial slab bearing a miller's rhind. On the north wall of the aisle are two burial slabs, one showing chalice and wafer, and inscribed in Latin, "Here lies Master Robert Vesey, formerly vicare of Stobo, who died 10 May 1473." This slab exactly fits the chancel wall tomb, and has been left rough on one side for insertion in a north wall, so it is almost certainly the slab from the tomb. In the west end of the north wall is a very elementary slab carved to show a knight in half armour, metal on legs and arms, with a jack of quilted woollen blanketing on the body. Between the slabs are two stones found on the site in 1929. Whatever their purpose they are certainly not the altar and font which they have been supposed to be. A mediaeval font survived at Stobo till at least 1843 but is now missing and may be the one in Dawyck Chapel. The eighteen century baptismal bowl and bracket are at the north side of the crossing. An aumbry can be seen in the west wall of the north aisle and, at about the same height, but nearer the arch, may be seen an incised tally for payment of the workmen. In this wall can be seen, externally, a long standing stone associated with pre-Christian religion.

The vestry contains a plan of the church under a curtain. Its drawing is accurate and reveals that the building, laid down by hand and eye, has not got a perfect right angle. The comments on the plan are not always reliable. A wooden memorial commemorates the successor of Vesey who, as a non-graduate, is called "sir". In the loft above is a good but neglected set of chairs. A window in the tower shows two openings, the small upper one, it is suggested being for ventil-

ation by night when the lower window was closed by a shutter while a lamp was burning within. The tower, which is built on to the west wall of the nave and not into it, appears therefore to have been later. The present saddleback roof was built about 1658 when the tower was ruinous and reduced to its present height.

CAROLINE PARK.

The house appears to have been built in 1685 by George, Viscount Tarbat.

It is quadrangular in form; the present south front was added eleven years after the house was built—that is in 1696, which is the date carved above the dormer window in the centre of the very steep-pitched south roof.

The original house is described by Messrs. Gibbon & Ross as having been built in the “homely Scottish style,” but Viscount Tarbat desiring a more pretentious country mansion, added the east and west towers, and re-faced the entire south wall between them with a fine, smooth sandstone.

The architect of this restoration is said to be Sir William Bruce of Baleaskie and Kinross, the architect of the more modern part of Holyrood. Viscount Tarbat was living at Holyrood at the time Caroline Park was being altered and both places resemble each other in some ways.

The house for the most part is only one room thick although where the rooms are small there are two between the outer wall and the wall of the courtyard, and all these rooms communicate with one another—a most inconvenient arrangement but one found in palaces and large houses of 16th, 17th and 18th centuries.

There are two wide stone staircases, one from the North Hall and one from the South Hall. The iron balustrades are very fine pieces of hand-hammered iron-work supposed to have been executed at Augsburg in Germany. The design is floral with the rose prominent. The iron was originally gilded but is now painted.

The north front is original. The roof is flat with a stone balustrade. In the centre of the wall above the north door is a stone tablet with a Latin inscription which reads :—

“ Riches unemployed are of no use, but made to circulate they are productive of much good. Increase of property is accompanied by a corresponding increase of care, wherefore, for their own comfort and that of their friends, George and Anna—Viscount and Viscountess Tarbat—have caused this small cottage to be built in the year of the Christian era 1685. Enter then O Guest, for this is the house of entertainment. Now it is ours, soon it will be another's ; but whose afterwards we neither know nor care, for more hath a certain dwelling ; therefore let us live while we may.”

On the western tower of the south front are carved the words “ Anne, Viscountess Tarbat ” and on the eastern tower “ George, Viscount Tarbat ”—above the windows of their respective dressing-rooms.

The Viscount's dressing-room communicates by means of a wheel-stair with the ground floor room underneath. This room has a door to the outside and would be used by the master of the house to interview workers on the estate. Lady Tarbat's room has no communication with the room beneath it.

The wrought-iron railing of the balcony over the porch shows a Viscount's coronet, and the monogram of Viscount Tarbat and his second wife the Dowager Countess of Wemyss, also a swan, the crest of the Wemyss family and a Deer's head, part of the crest of the Mackenzies of Seaforth, formerly existed. In addition there are the thistle and the rose, indicating Lord Tarbat's desire for the union of the two kingdoms, England and Scotland. Above the centre window on the second floor is carved ‘ the sun in his splendour,’ the crest of Tarbat of Cromarty ; while above the dormer window in the roof is carved the ‘ rock in flames ’ for Macleod of Harris, whose motto is ‘ I shine, but I do not burn ! ’

The drawing room has a fine plaster ceiling in the centre of which is a picture representing a mythological scene—“ Aurora ” or “ Morning ” signed “ N. HEVDE, INVENTOR.”

On the cornice in the centre of each of the sides is the richly

worked monogram "G.A.T." (for George, Anna and Tarbat) surmounted by a Viscount's coronet.

The plaster work of the ceiling was probably carried out by Italian workmen who were engaged on similar work in the royal apartments at Holyrood.

The small drawing room has a similar ceiling with a circular painting of "Diana visiting Endymion" signed "N. HEVDE, I."

Nicholas Hevde appears to have been a French artist, a pupil of Antonio Verrio, an Italian artist, whom Charles II invited to England to paint ceilings at Windsor Castle and Hampton Court Palace.

In this room are also four monochromes on the walls and decorative panels which make it an even finer room than the large drawing-room.

One of the most interesting features of the old house is a number of monochrome paintings to be found in some of the rooms. These are for the most part imaginary landscapes, but one is supposed to represent "Inverary Castle" as it appeared at the time the second Duke of Argyll acquired Caroline Park about the middle of last century. He left the house to his eldest daughter, Lady Caroline Campbell, who had married Francis, Earl of Dalkeith, who died in his father's lifetime and it passed on her death in 1793 to her son Henry, Third Duke of Buccleuch.

INVERESK.

By G. WARDLAW-BURNET.

If you will kindly imagine yourselves in Inveresk some 200 years ago, say in 1750, you will find a very different village from the one you see today. Across the road from here in 1748, an Edinburgh merchant, by name of Archibald Shiells, had recently bought up a row of small cottages and built himself a grand mansion in the Dutch style which he christened The Manor House. A little further on, in about 1760, Archibald Ainslie, another merchant, this time in Leith bought, to quote from the titles, "three cockhouses and a yard" for £20 ls. from an Edinburgh lawyer, Alexander Weir, and built the house we know to-day as Oak Lodge, but which was then known more modestly as Acorn Lodge. In 1771, an accountant in the office of the Court of Exchequer, by name of Alexander MacDougall, bought some small buildings opposite Oak Lodge from John Brown and built a house which he named Inverhill but which today is called Eskhill. Next door to him, at about the same time a certain Alexander Christie was also busily buying up some small tradesman's cottages and he built himself another gracious house, to-day known as Catherine Lodge; possibly copying his opposite number in the Manor House, he embellished his house with his monogram, but he also added his coat of arms to go one further.

Modern Inversk therefore dates largely from the second half of the eighteenth century. Before that we had the old mansions of Inveresk Lodge and Halkerston at the south end of the village separated from the old home of the Colt family—Inveresk House—and the Kirk by numerous little cottages, glimpses of which can be traced to-day in the walls running on either side of the road.

I have said that at the north end of the village in Inveresk House lived the Colt family, where they lived for several

centuries, from about 1590 until the end of the nineteenth century. The present house was built by Adam Colt on a site of artillery fortifications used at the battle of Pinkie and although there have been many extensions to the building, particularly in this century the original house can still easily be seen.

In the sixteenth and seventeenth centuries the Colts were large land owners, and their property extended all over Inveresk hill, and included what is now the village.

Adam Colt, the builder of the house, was the second minister of Inveresk Church after the Reformation, and he held the charge for 46 years until demitting it in 1641 in favour of his son, Oliver Colt, who remained the minister until his death in 1679. When Cromwell was encamped in Musselburgh he used Inveresk Lodge as his headquarters, and Oliver Colt, taking refuge from Cromwell, fled to Montrose only to be captured shortly afterwards by some of Cromwell's men and taken before the Lord General for refusing to surrender his horse to the men ; he got off with a warning from Cromwell thanks to his glib tongue. A propos Oliver Cromwell's stay in the house when some alterations were being carried out in the seventeen eighties, a forgotten secret tunnel was discovered, which led directly under the room used by Cromwell and at the end of it was discovered a Cavalier in full armour with what appeared to be a keg of gunpowder at his side. Nobody knows who the cavalier was although it may well have been George Colt, the younger brother of the Reverend Oliver, about whom nothing is known.

The north end of the village is also famous as having been the centre of a Roman encampment and throughout the centuries Roman remains have been discovered, the most important being possibly in 1770, when in the process of laying out a bowling green in the grounds of Inveresk House, extensive foundations and a Roman bath were unearthed. The first Roman discovery was, however, actually made in the grounds of Esk Grove when an altar was discovered in 1565 with a Latin inscription, and shortly after this Protector Somerset had camped in the same grounds before the battle of Pinkie—a fact which is now commemorated by a plaque in the garden

wall. In more modern times Esk Grove was better known as the residence of Sir David Rae, a Senator of the College of Justice, with a title of Lord Esk Grove who lived there at the end of the eighteenth century. After the end of the Roman invasion Inveresk came first into the possession of Christian monks from Ireland and eventually the monks of Newbattle and the Abbot of Dunfermline. Tradition has it that the monks established a correction house on the site of Halkerston, Inveresk Lodge and Shepherd House, and the last two were supposed to be connected by an underground tunnel one end of which can still be seen to-day in Shepherd House gardens. Shepherd House takes its name from the fact that it is built on the site of a cottage occupied by the shepherd who looked after the cattle on the Musselburgh town grazings, and the present house was built about 1820, traditionally by Dutch seamen, but actually by our friend Alexander Weir who owned the cockhouses. Its graceful curving gables are most attractive.

Another famous inhabitant, whose house was built on top of Roman remains, was Admiral Sir David Milne, who lived in then what was known as Inveresk Gate. He commanded the navy at the battle of Algiers in 1816 with his flag in the Impregnable and he laid out the most magnificent gardens in the grounds which at one time botanists came from far and near to visit.

Catherine Lodge takes its name from Catherine Moodie, wife of the Reverend James Moodie, who was Minister of the Kirk from 1805 to 1840. Mrs. Moodie was a Fergusson of Kilkerran, the family of the present Keeper of the Registers of Scotland, and for a time after her death the house was a sort of dower house for the Fergusson family and kept for the use of the widow of the Baronet of Kilkerran. It remained Fergusson property until as recently as 1924.

No eighteenth century Scottish village was complete without its inn and the inn in Inveresk is supposed to have been in Rose Court. This house and Rose Hill next door, were originally one property, and indeed it was only about fifty years ago that they were divided. While the building was used as an inn which must have been before 1780, the present

front of Rose Court was not in existence, and travellers drove in through the gates to stable their horses and walked through to the main block entering by the then front door at the foot of the turnpike staircase in Rose Hill. While alterations were being carried out recently to Oak Lodge an old poster was discovered advertising the stage coach leaving the inn at Inveresk and running between Dalkeith and Inveresk. The front wing of Rose Court was built in 1820 by Thomas Scott and is the most modern major erection in the village to-day.

The Manor House, built by an Edinburgh merchant, Archibold Shiells, in 1748, is a tall gracious house flanked on both sides by matching pavilions with Ogival roofs and with much fine eighteenth century carved pine panelling and some Italian murals on the upper floors. It is the only house in the village to have had any large Victorian wing added to it, and even here, it was done with a good deal of care and taste by the Lady Mary Oswald who owned the property between 1850 and 1886. In 1846 it was bought by Lieutenant Archibald Spens, a nephew of Doctor Nathaniel Spens, the subject of Raeburn's famous portrait but he only kept it for two years before selling it to Lady Mary Oswald, widow of Richard Oswald, of Auchincruive, whose father had taken a prominent part in the American War of Independence and had actually negotiated the terms of the peace treaty with President Franklin. Lady Oswald, whose maiden name was Kennedy, and who was a relative of the Earl of Cassilis, was a noted local philanthropist, who ran her own Sunday School in Newbigging and spent a lot of her time buying shoes for the bare footed children of the village only for them to put into pawn the next day. She died in 1886, leaving the property and to quote from her will: "all the wine in the cellar" to her nephew, Lord Gilbert Kennedy, who sold it immediately to the Wauchope family. The two old Miss Wauchopes, who lived in the house for many years, were of an extremely cautious frame of mind, and had bolts fitted to all the bedroom doors, which could be worked only by the occupant of the room by a remote control apparatus which obviated the necessity of getting out of bed.

Halkerston is built in a most unusual design: the plan is

a square with a vaulted laich floor to the rear, but the distinctive character of the house is due chiefly, I think, to the huge pyramid shaped roof covered with small slates with two enormous chimney stacks on either side. The internal arrangement is again rather unusual, and the present front door is, I imagine, not original.

Historically, although a house has stood on this site since 1600, at any rate the present house was built by John Rhynd between 1637 and 1642. Rhynd was a member of Edinburgh Corporation, and a Baillie of the City in the sixteen thirties, and it was sold shortly after completion to the Grant Sutties of Balgone.

Its name of Halkerston is comparatively recent and dates from the purchase of Helenus Kalkerston of that ilk in 1779. Helenus was a noted eccentric of his time, and always in financial difficulties, so much so that his only daughter—whom he named Charles—inherited only the house and £20 from him when he died.

Inveresk Lodge is a typical L shaped mansion of the period and on the window of the stair of the tower is the date 1683. This is the earliest part of the house and according to the Ancient Monuments book the whole building was completed before 1700. The most attractive features are, I think, the steep pitched dormers with their sloping roofs and the steep crow stepped gables. The early title deeds of the house are unfortunately missing, but as far as I have been able to discover it was owned by Sir Robert Colt, Solicitor General for Scotland during the reign of Charles II, although, of course, the building was not then in the shape we know it to-day. Another later Robert Colt who lived in the White House, is noteworthy as having been the only member of Parliament to have lived in the village. He did so in the seventeen sixties, and he was a Member of Parliament for Weymouth Burghs. Some 200 years later the White House belonged to Sir Frank Meers, the eminent architect, who was responsible for having the village scheduled as being of architectural importance under the Town and Country Planning Act. To get back now to Inveresk Lodge, in 1775 it came into the possession of the Wedderburns of Blackness who at one time were a wealthy

family with strong Jacobite leanings. Their importance, however, tended to wane when Sir John Wedderburn was executed for treason in 1746. It remained the property of the Wedderburn family until the middle of the nineteenth century when it was sold to the Elphinstones of Logie Elphinstone. By this time the large field below the house, known as the Dovecote Park, had been added to the garden, and in modern times had been laid down as a magnificent rose garden by Mr. and Mrs. Brunton until it was unfortunately washed away in the disastrous floods of 1948. The house was given to The National Trust for Scotland by Mrs. Brunton in 1959 with an endowment for its upkeep.

THE PARISH CHURCH OF ST. GREGORY THE GREAT, KIRKNEWTON, NORTHUMBERLAND.

By REV. PETER RENDELL.

There is evidence, to suggest with confidence, that the origin of the Church in Glendale is to be found with St. Paulinus. He had been sent in 601 by Pope Gregory I to assist the mission of Augustine to Kent. In 625, when Edwin, King of Northumbria, married the Kentish King's daughter, Ethelburga, Paulinus was consecrated bishop and sent with her to York. In 627 Edwin and his court accepted the faith, and from that year until the defeat and death of Edwin in 633, Paulinus travelled about the vast kingdom establishing Christian communities. There is little doubt that he visited Yeavinger and established a church there, near Edwin's palace. This spot is just less than a mile east of the present church.

The recent excavator of Yeavinger, Dr. Brian Hope Taylor, told the present vicar that there was evidence to suggest that a pagan temple there had been converted for Christian use.

Strangely, the dedication of a church in honour of St. Gregory the Great is rare. Only traces of thirty-five such dedications are known in the British Isles. Nothing can be proved from that, but nearly all the ancient dedications in Northumberland are in honour of the Saints of the "Iona-Lindisfarne line," *e.g.*, Columba, Aidan, Cuthbert, Bede, etc., few, if any, others are in honour of a Saint of the "Rome-Canterbury line."

The earliest note of this dedication is in a document dated 1223 which refers to the Vicar of the Church of St. Gregory in Newton in Glendale. The first clearly identifiable incumbent being one Stephen, Rector of Newton in Glendale from 1153 to 1197.

How long a church has stood on this present site as distinct from the primitive site at Yeavinger is uncertain, but probably for some time before the eleventh century.

The early church was a cruciform building without aisles,

to which a North aisle was added in the late twelfth or early thirteenth centuries. In the course of excavations made in 1860, it was discovered that the Chancel had originally extended a bay further east, thus being unusually long in proportion to the rest of the building. The base of the present west wall marks the limit of the original church westwards. The addition of the north aisle absorbed the original north Transept chapel which corresponded to that in the south transept which still stands.

Owing to the recurrent border warfare there were several periods of varying length when the building was in ruins. In 1436 the then vicar was licenced by the Bishop of Durham to say Mass in any safe and decent place in the parish, but outside the church. It was not thought prudent to gather the parishioners in one place at one time.

It was in the rebuilding at the end of the fifteenth century that the old long chancel was destroyed and the present chancel erected. The ancient foundations provided the base for the north and south walls which are only about a yard high. It is from these low walls that the splendid and distinctive barrel or tunnel vaulting rises. Clearly part of the intention of the builders was to provide a building strong enough to withstand fire and assault. The great thickness of the walls can be seen at the south window of the chancel.

The chapel in the south transept was built in the same style, but here there is no upright wall, the slope inwards of the vaulting starts at floor level.

The north aisle, built at the end of the twelfth or beginning of the thirteenth century, must have been destroyed later, for in 1796 the north transept chapel, the Coupland chapel, was standing free again as in the original cruciform building. This transept was pulled down in 1796 at a cost of ten shillings to the churchwardens, and the north wall built up the length of the nave, leaving a building in cruciform shape minus the north arm.

How many times the church has been rebuilt is uncertain. We know of rebuildings at the end of the twelfth century, in the fifteenth and again in 1669 when the condition was described as ruinous. Yet the former state could not have



Polwarth Church.

Ayton Church.



EXCAVATION AND RESTORATION OF ROMAN WALL BELOW
WILLOWFORD FARM



1. Removal of soil
and loose stones.

Note tree stumps in
this and 2.



2. Before (r.) and
after (l.) restoration.

3. Bridge Abutment.

Note the 2 culverts
running under the
end of the wall ; left,
apron of protective
masonry ; bottom
right, base of bridge
pier.





4. The Stanegate
West of Chesterholm
(Vindolanda).



5. Vindolanda Fort,
above, Chesterholm,
showing 'Principia.'

6. South gateway of
Milecastle 42, near
Cawfields.





OVER DENTON CHURCH, CUMBERLAND.

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CORSTOPITUM GRANARY.

(Photo J. Stewart, Longformacus)

been so hopeless as the present octagonal font was erected in 1663, probably to replace one destroyed during the Commonwealth.

In 1856 the church was dilapidated once more and there was a need for a larger building. This restoration was entrusted to Mr. John Dobson who produced the present Nave and north aisle and the tower. The nave and aisle being in the lancet style, the tower in perpendicular style. The church is fairly large for this part of the country. Dobson's work was completed in 1860, the tower being added some years later, but oddly, no definite date has been found by the writer.

The great treasure is a Relief of the Adoration of the Magi, of crude workmanship and somewhat disputed date. Most opinion puts it at twelfth century, but one authority suggests that it could well be of a much earlier date. Whether this stands in its original place, or has been moved from the nave or an aisle during one of the many rebuildings is uncertain. The fact that the three kings are dressed in kilts may have had some contemporary political significance!

The original registers date from 1670 but were so damaged in a fire in 1785 that only charred fragments remain. Apart from those in current use, the registers are lodged with the Northumberland County Archivist.

This church typically marks the contrast between so many ancient churches in the north and south of England. Not for us the subtleties and complexity of design and execution of so many southern churches. No delicate Cotswold traceries, no glorious East Anglian spaces. Here the emphasis has been more utilitarian, the comparative ruggedness of country and climate producing designs more strictly practical and so more severe. But the turbulent Border history has been decisive in giving us the churches we have. The strife has robbed us of that security and consequent prosperity in which alone the great arts flourish.

Kirknewton is a case in point. It stands in a valley long used as a highway to the border of the two kingdoms, and security has not been ours until recent times. Yet, like so many of our Northumbrian churches, this has a simplicity not without majesty, and a strong masculinity.

FROM OVER DENTON TO CHESTERHOLM : THE WALL AND OTHER ROMAN REMAINS.

By MISS DONALDSON-HUDSON, B.A., F.R.Hist.S.

Some ten members, many of whom had had to drive through drizzling mist, foregathered in bright sunshine at Greenhead, Northumberland, for this Extra Meeting on July 3rd.

Our first draw was for an outlier—the tiny church at Over Denton, one of the gems of North Cumberland and of great antiquity, so ancient indeed that its dedication is unknown. Could the original church have been founded, we wonder, by St. Cuthbert in the course of his missionary wanderings ? The present church has Anglo-Saxon remains, but it is mainly of 11th-12th century construction ; in 1881 it was extensively, and very well, restored. It consists simply of a chancel and a nave without side-aisles, has no vestry or belfry, and is reputed to be one of the smallest churches in England.

Remains of the old Anglo-Saxon church survive in the north wall: in a low square-headed doorway (now walled up and only visible from the outside) and in a narrow window which is made of only four stones—two for the jambs, one for the sill, and one for the arched lintel. On the inside of the north wall, just east of this little window, is set a decorated slab from the tomb of a warrior-priest : it bears in low relief a floriated cross and a sword. The latter is on the right of the cross (*i.e.*, the viewer's left), suggesting that the warrior-priest was a left-handed man.

The finest and most interesting feature of the church is the chancel arch which is of Roman masonry and almost certainly came from one of the gateways of Birdoswald fort, which is just across the river Irthing to the north of Over Denton, less than a mile away. Within the altar rails is an ancient font which is also of Roman stone—probably the top of an altar or other monument. The present font, at the west end of the church, has a bowl of porous stone and consequently never needs to be emptied.

In the churchyard is the grave of Margaret Teasdale, the

original of "Meg o' Mumps Hall" in Scott's *Guy Mannering*. She was apparently a very notorious character ; nevertheless she had reached the ripe age of 98 when she died in 1777. The inscription on the grave-stone reads :

What I was once some may relate
What I am now is each one's fate
What I shall be none can explain
Till He who called call again.

We saw Mumps Hall later in the day as we drove through Gilsland village. The house has been modernised, probably largely rebuilt, but the old square stone-mullioned windows, now blocked up, are still visible.

From Over Denton we went on to Willowford Farm, which stands above the valley of the Irthing, about a mile out from Gilsland. The farm road at first runs alongside a length of Roman Wall which was excavated and restored soon after World War II. Then, at a gateway, it cuts across the line of the Wall and follows the ditch or "foss" on the north side of the Wall. From the gate to the farm there now runs a fine stretch of Wall, which was only uncovered within the last two years. Before that a rough grassy bank, overgrown with trees and briars, with a few loose stones lying along its base, was all there was to be seen. Now, six or seven courses of "narrow" wall (8 ft. wide), cleared of trees and débris, scrubbed clean and grouted with lime-mortar, stand on a broad foundation (10 ft.) which may be up to three or four courses high. The party had its picnic lunch at Turret 48b !

West of the farm, towards the river, a row of big trees used to mark the line of the Wall. The trees have now been felled and the Ministry of Works' men are engaged in excavating the Wall to its foundations, in clearing away soil, tree roots and fallen stones, and in re-setting the stones that are still in the Wall. It is extremely interesting to see the work actually in progress. After the Wall has been exposed, every section of it is photographed. If any stones have to be moved, as for example to get out tree stumps and roots, these stones are taken down one by one in their right order, course by course, and laid on planks ; they can then be replaced exactly as they were originally. If there is any doubt about their

correct position, the photographs can be referred to. The stones are set in a mixture of lime and mortar which is as nearly as possible the same as that used by the Romans. After the joints have been made good and when the mortar has had time to harden off slightly, the stone work is scrubbed over with a brush and finally a garden syringe is used to wash the fine gravel out of the joints, which leaves them with a slightly granulated surface. ((Many archaeologists take exception to this process, indeed to the whole work of restoration, which they describe as "faking"! But I feel that there are many of our members who have seen the finished product, who will agree with me that the result is not only very impressive but invaluable in preserving for future generations what is left of one of the greatest of our ancient monuments).

At the lower (western) end of this stretch of Wall is the abutment of the Roman Bridge over the Irthing, a far finer example of this type of structure, I submit, than its counterpart at the North Tyne crossing below Chollerford. The Willowford bridge-head was uncovered in 1939-40. It seems that it was twice rebuilt, thus making three phases of construction.

The bridge, in its earliest period, was guarded by a turret of which the merest vestiges remain : just a recess in the south face of the Wall gives a clue to its position. A splayed foundation, west of this turret, is all that is left of the original abutment.

In Phase 2, a larger turret, of which quite substantial remains are to be seen, was built to the east of Turret I to guard the reconstructed Wall, which rode over the earlier abutment and ended in a pair of narrow culverts probably serving a mill. An apron of masonry was added to the north face of the Wall to protect the lower end of the berm from the stream.

In yet another reconstruction (Phase 3), the earlier splayed abutment was enlarged westwards, thereby blocking the first conduit ; and a large pier was built out in the stream, whose bed is here paved to provide, apparently, for an undershot mill-wheel. A stone spindle-bearing, discovered on the abutment in the course of excavations, lends colour to this

theory and also to the supposition that the surviving culvert represents a mill-race.

A great deal of the later structures embodies re-used masonry. A large voussoir built into the pier and two massive haunch-stones in the south foundations of Turret II suggest that the arches of the original bridge had carried a very heavy super-structure, perhaps the Wall itself.

Just as in the case of the North Tyne, so the river Irthing has changed its course considerably since Roman times : it now runs some 200-300 yards further to the west than it used to then. In the course of the centuries, what must have been an easy upward slope from east to west has become a precipitous cliff. Successive floods and land-slides have undercut and eroded more and more of the cliff face, and with it has gone a large section of the Wall. We now see the bridge-head sitting in the middle of a flat meadow. Incidentally, excavations carried out in 1940, to the west of the bridge-head, revealed the foundations of two further piers ; these are now ten feet below the surface of the land.

The next port of call was the ridge of the Whinsill between Carvoran and Walltown Crag—the “ Nine Nicks of Thirlwall,” as it used to be called. On the way there, between Gilsland and Greenhead, we had a distant view of ruined Thirlwall Castle, which was entirely built of stones from a Roman Wall just below it ; we could also trace the Wall-ditch and the *Vallum* in three parallel lines running up the hillside beyond Thirlwall Castle.

I will not here describe that magnificent section of the Wall which follows the ridge from the lip of the stone quarry up towards Walltown Crag, as I have already given an account of its main features in a paper I contributed in 1959 to the Club’s “ History ” (Vol. XXXV, Part I). Suffice it to say again that it is the most spectacular piece of Wall yet to be uncovered, and to quote one of the Ministry’s men who worked both here and at Birdoswald and is now working at Willowford : “ Ay, the finest part of t’Wall is the bit oop by Walltown.”

From here we headed east along the Military Road, pausing just beyond the bridge over the Haltwhistle Burn to observe the “ bones ” of the Agricola fort (opposite Common House

Inn) and the line of the Stanegate (Agricola's road from Newcastle to Carlisle) which crosses the Burn below the fort.

A short way on, close to the Standing Stones known as the "Mare and Foal," a side road to the north led us to a point from which all the components of the Wall system could be seen at once: the *Vallum* lay at our feet, stretching away westwards like giant tramlines; a faint line half way up the grassy slope in front of us marked the *Military Way*, used for the movement of troops at the rear of the Wall; and on the skyline, the Wall itself.

Continuing round the back of Whinshields Crag we returned to the main road, which we crossed in the direction of Bardon Mill until we came to the gated road that leads to Chesterholm. This rough road across fields is the actual Stanegate, and it is amazing to think that after nigh on 1900 years it should still be passable for wheeled traffic. Moreover two of the ancient milestones are still by the roadside.

Chesterholm—Roman *Vindolanda*—is the site of a most interesting fort. We owe it to Professor Eric Birley, who excavated the walls, the gateways and headquarter buildings and then presented the site to the nation, that we have here a very fine example of 4th century building.

His excavations showed that there had been three successive forts on this site. The earliest was pre-Hadrianic and, since the Stanegate almost passes its gates, it is fairly safe to assume that it was founded by Agricola, about 80 AD. After the building of Hadrian's Wall some forty years later, it went out of commission until 163 AD, after which it was re-occupied until the end of the century.

Following the first great destruction of the Wall, in 197, by the Caledonii and Maeatae, the Emperor Severus initiated a wide programme of reconstruction of the Wall, its forts and outposts, which covered the years 205-208. Chesterholm, only a mile or two south of the Wall, may well have suffered at the hands of the northern barbarians; certain it is that under Severus it was laid out on new lines as a large and architecturally pretentious fort, with its *principia* (head-quarters) facing south.

Within a hundred years, about 300-305, the place was once

more completely rebuilt and its headquarters turned round to face north. This *principia* is the building whose interesting remains we now see in the middle of the site. At the west end of the cross-hall is the tribunal, with steps leading up to it. The stone screens of the hall should also be noted : they were made of great square stone panels, decorated in low relief and set between stone piers. In the middle of the south side is the Chapel of the Standards and in it is the regimental treasury, which is of an unusual type—a pit-like structure forming three sides of a square. At the south-west corner of the *principia* is the “furnace-room” which supplied hot air for the hypocaust.

Extensive repair work was carried out in 369 AD, under Emperor Theodosius. This followed the third wave of destruction and havoc wrought by the northern tribesmen between 367 and 369.

West of the fort, as shown by the hummocky ground, lay the bath-house (always a necessity to a Roman garrison) and a considerable *vicus* or civilian settlement. The *vicus* was a self-governing community, and in Chester's Museum is an altar dedicated corporately by the *vicani* to their local god. Also at Chester's Museum is a particularly fine altar from the Commandant's House (*praetorium*) at Chesterholm. On one side of the altar are depicted an axe, a knife, and the sacrificial victim, an ox ; on the other side, a jug for holding the wine and the *patera* (dish) for pouring it as a libation. The dedication is translated as follows : “Sacred to the Genius of the praetorium, Pituanus Secundus, prefect of the Fourth Cohort of Gauls (erected this)”. It is known from a declaration of loyalty (on a monument now in Housesteads Museum) made in 213 to Caracalla, son and successor of Severus, that this Cohort was garrisoning Chesterholm early in the 3rd century.

Since the Extra Meeting on July 3rd I have “discovered,” if I may so use the word, another fine stretch of Roman Wall, which I recommend members to go and see for themselves. It is easily accessible from the main Chollerford-Greenhead highway : turn off opposite Common House Inn, which stands at a cross roads just above the bridge over the Haltwhistle

Burn, along a north-bound road signed for Whiteside. Within half a mile the Cawfields Milecastle comes clearly into view. It is better not to drive directly towards it by a rough field-track, but to carry on as far as the old quarry workings and then bear to the right as if for Cawfields Farm; a short walk uphill then brings you straight to the Wall at Hole Gap.

Eastwards of the Gap and just above it stands the Mile Castle, No. 42. First excavated by Clayton in 1848, it has been "re-conditioned" since 1961 by the Ministry of Works. The walls are up to six or seven courses high and are 8 feet thick. At the lower end—for the Mile Castle is built on a steep slope—I noticed that the bottom two or three courses are stepped outwards: the effect, I thought, would be to buttress the thick high walls and to counteract their downward thrust due to the steeply-sloping ground.

There are remains of the two gateways, north and south, both built of massive and very imposing blocks of stone.

West of the Milecastle, the Wall (newly restored) runs down to the Gap, then steeply up the other side for about 100 yards before it peters out at the edge of the now disused quarry. East of the Milecastle the Ministry's workmen have begun clearing, restoring and generally tidying up the Wall and it is planned to carry this work right through to Caw Gap, where the next road cuts through the Wall. (It was from below Caw Gap that we surveyed the Wall, the Military Way and the Vallum on the day of the Extra Meeting).

The part of the Wall above Cawfields is well worth a visit. There is a wide and beautiful view from the top of the ridge and the Wall itself is a mass of wild flowers, including wood sage, thyme, the lovely little yellow rock-rose and even a patch of white heather.

Before leaving, take a short walk along the road to Cawfields Farm to have a look at the north side of the Whinsill escarpment. The rock-wall rises almost sheer, stark and forbidding, and showing the characteristic columnar formation of dolerite, just as we have seen it near the Walltown Craggs and again between Crag Lough and Housesteads.

No. 9 MARYGATE, BERWICK-ON-TWEED.

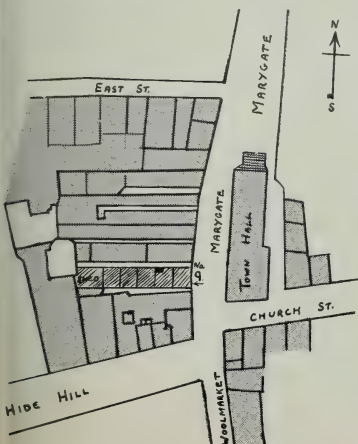
Photos taken during demolition of 400+ year old house in March, 1962. Measurements, 22' frontage by 125' long. Long and narrow, with a passageway at either side.



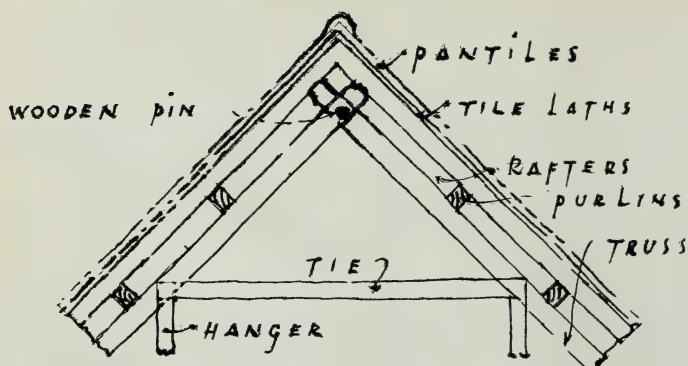
Left.—Large fireplace of stone, probably Tudor, on 1st floor in the northern wall.



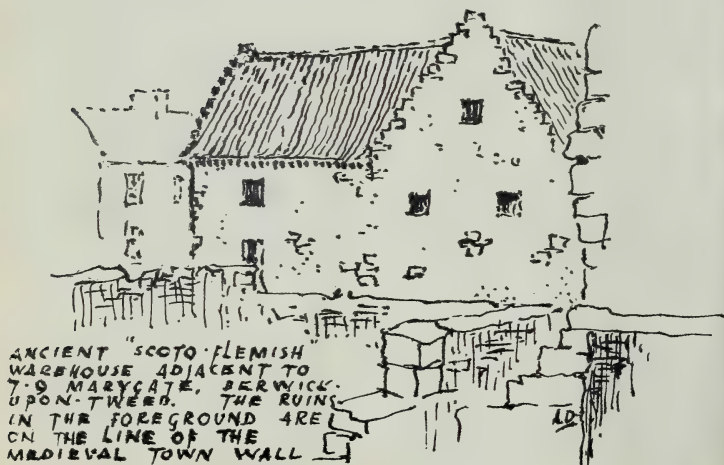
Above.—A mud and straw ("claut and clay") wall on the northern wall-boundary for 30' in length by 2' thick by 12' high. It was very strong and difficult to demolish. Large stone Tudor fireplace on 1st floor of northern wall, capable of burning 8' logs. Marked X in wall. Roof beams and rafters were of solid rough hewen oak throughout. The lowest room seen here was panelled at a much later date.



Left—Ground plan sketch of No. 9 Marygate, Berwick-on-Tweed.



SKETCH DETAIL OF ROOF CONSTRUCTION AT
7-9, MARYGATE BERWICK-UPON-TWEED



NOTES ON THE DEMOLITION OF AN OLD HOUSE IN BERWICK-ON-TWEED.

By MONA CARR.

In March of 1962 the very old property of No. 7 and 9 Marygate was pulled down to make way for a new building. The house is opposite the Town Hall and is in one of the oldest parts of the town. It is long and narrow (see ground plan in red) measuring 22 ft. in width by 125 ft. in length, with long narrow passages at either side. This curious elongation was useful in those boisterous days, to enable one or two men with a sword to defend the whole passages at the doorway. The house had been partly rebuilt at many times and periods, but the oldest parts were of 400-600 years, and the front (the street section) being rebuilt in the early 19th century. The most interesting part was the Warehouse at the far end. This was Scoto-Flemish in design, having a very steep roof of 60 degrees, and was probably used as a shed for storing grain or wool. The wood and rafters of the old part were of rough hewn oak throughout. The house is situated only 100 yards from the Woolmarket and in the very middle of the trading area. In those days the Town House and booth were just outside their front door and the Town Cross a little way off, in the middle of the street where Marygate, Woolmarket, Church Street and Hide Hill meet. The house had three stories which included the attic, the ceilings were low. One or two of the oldest windows were very small indeed, but most had been altered at some time and as the passages were narrow and the opposite walls high, it must have been very dark inside.

Part of the northern wall (30 feet) was made of clay and barley-straw mixed; the barley heads in the straw being clearly seen. The first 10 ft. from the ground was of local sandstone and whinstone (unhewn); then came 10 ft. of "claut and clay" wall, two feet thick and 30 ft. in length.

This formed one side of the middle storey of the northern wall. It was very strong and hard and the workmen had some work to pick it to pieces, but once the rain got into it, it crumbled quickly. I found three oyster shells in this clay. This wall was one of the oldest parts of the house.

An old Tudor stone fireplace was found intact in the northern wall, large enough to burn 6 foot logs.

The construction of the roof was beautiful and most interesting. The main trusses were of axe hewn oak, crossed at the top and held together by a wooden pin one inch square and tapered to a wedge. (see sketch). This pin was called the Bogair Pin. The purlins were of oak and the tile laths covered with red pantiles. The Hangers were solid oak trees, round and rough hewn, they rested on stone piers built up from the ground.

As the walls were not strong enough to carry a stone roofing the original roofing must have been of thatch. The first pantiles in the district were made at Lowick about 1480.

As the house is large, as houses go, it may probably have been built by a merchant or someone of some standing, with his servant's families occupying the rear portion near the warehouse. It is sad to see these very old houses disappearing in Berwick.

THE SPADES MIRE, BERWICK UPON TWEED

By K. G. WHITE, M.A., F.S.A., Scot.

The Spades Mire is a linear earthwork running from N.R. 995536 (where it is represented by a dip in the wall of the railway cutting) to 002536. It is filled to 996536—this filling may date only from the construction of the railway—interrupted by the road at 999536 and apparently filled from 002536 to the sea cliffs. What appear to be traces of a rampart on its Southern side exist at 003536 and 998536. It appears to have been a rampart running from the sea to the former Tapee Lock (1) from the other side of which the ground fell steeply to the Tweed and thus it sealed off from the North

the peninsula upon which Berwick stands. The total length is 900 feet ; it is 30 feet wide and 10 feet deep West of the road, though evidently partly filled. East of the road it is still more filled.

A mound exists on the northern side of the ditch except in the area of the Married Families Camp ; another, South of the ditch and East of the road appears to be a flattened rampart, ploughed into two rigs. There is also a mound on the South from 997536 to 998536.

From its relation to the defences of Berwick, both mediaeval and Elizabethan, the Spades Mire appears to be earlier than either. The defences of the 13th Century Scottish Burgh have never been located but seem to have been slight (2). They possibly followed the lines of the 14th Century walls. The work also seems to be earlier than the rigs and furrows of Coneygarth and the Magdalene Fields, which respect it, as if it were there when they were made. In this respect it is a contrast to the 16th Century Covert Way, which appears to entrench on the rigs to its North.

The earliest documentary reference to the Spades Mire is probably an entry in the Guild Book of 1659 (= 1660). (3) Scott (4) quotes a reference in a list of citations of 1616 but the MSS of the only extant Court Book covering this date (1605-37) includes no such list of citations. It is evidently either a mistake or refers to a Court Leet Book now lost.

The map of about 1570 in the Hatfield House Collection (of which there is a photostat in the British Museum (5)) appears to show the Spades Mire—no other map does till the Ten Foot Survey of 1852. A document in the Public Record Office (6) refers to what sounds like the work (but under the name of Sterling Dike) existing in the 1520s.

In 1961 and 1962 it was decided to excavate a control section at 997536, 99 feet long, to tie the work onto the rigs in Coneygarth to the North and those on Berwick Grammar School hockey pitch (revealed by an air photograph) to the South. Unfortunately as the cutting became dangerously deep it had to be abandoned before the ditch bottom could be excavated. The work as a whole cannot therefore be dated archaeologically. It was, however, shown that the mound

from 997536 to 998536 is quite modern. The ditch is partly filled (it was originally considerably wider) and on top of the natural to the South of the ditch is what looks very like part of a rampart, ploughed into a rig. It was unfortunately barren as to finds.

North of the ditch the bank (ploughed into two rigs like that to the South of the ditch, East of the Road) contained a probably 13th Century sherd resting on the natural. It is *possible* that this bank—evidently scraped from the ditch bottom—was deposited then and the later finds—which range up to the 17th Century were due to ploughing. It is at least clear that these rigs were later than the ditch.

The remnants of rampart need to be explained—why they were kept and when. That overlooking the shore commands it—indeed the 16th Century Redoubt seems to have been built for the same purpose. It may possibly have been used in the same way as the later Bell Tower (7). For the other fragment there appears to be no explanation. The main rampart was probably removed (or flattened) when the mediaeval defences (either the 13th Century Scots defences or those erected in Edwardian times) were built. An alternative possibility would be the mounting of the mediaeval wall with artillery.

(A full report has been submitted to the Proceedings of the Society of Antiquaries of Scotland).

References.

1. There appears to be no early source for the name but the lake was there in mediaeval times.—*J. Scott, Berwick-upon-Tweed*, 1888, p. 434.
2. *Scott, op. cit.*, p. 25 ; c.f. *Chronicon de Lanercost, Maitland Club*, 1839, p. 173.
3. *Guild Book*, 1659-81, f. 9 (in possession of the Corporation of Berwick) printed in *Extracts from the Minute Books of the Guild and its Committees (N.D.)* p. 35.
4. *Scott, op. cit.*, p. 307.
5. British Museum P.S.I./4231 Map 186 h.i.
6. P.R.O. E 36/173 MSS printed in *History of The Berwickshire Naturalists' Club*, Vol. XLV, pp. 177-186.
7. B.M. MSS Harley 7017 f. 147-8.

PLACE NAMES IN THE BORDER COUNTRY.

By R. DONALDSON-HUDSON, B.A., F.R.Hist.S.

Place-names are, generally speaking, a reliable guide to the ethnological history of a country or district, and this seems to be particularly true in the case of the Border counties of northern England and southern Scotland. Here we find names of Celtic, Anglo-Saxon, and Scandinavian derivation in fairly well-defined zones, which approximate very closely to what we know of the movements of these various races.

In his *Celtic Place-names of Scotland* W. J. Watson writes : "The place-names of Scotland fall into two great divisions, Celtic and Teutonic." But this, in fact, applies to England as well. In the matter of languages the term Celtic covers three groups :—Gaulish and Old British ; Welsh, Cornish and Breton ; and Gaelic which embraces Irish, Scottish and Manx. "Teutonic" (which I personally would rather call Nordic or Germanic) applies to the languages of all the peoples of northern Europe and includes German, Dutch, Anglo-Saxon, and Scandinavian. The last can again be subdivided into Danish, Norse and Icelandic.

If we remember that the Anglo-Saxon invaders came across the North Sea and attacked mainly from an easterly direction, thus forcing the native British (whom they called *Welsh*—strangers, foreigners) westward into the wilder and more mountainous regions of Devon and Cornwall ("West Wales") Wales (then called "North Wales"), Cumbria in the north-west of England, and Strathclyde and Galloway in south-west Scotland ; then we may readily suppose, rightly too, that Celtic place-names would predominate in the west, which in the present context means Cumberland and south-west Scotland, while in eastern England and south-east Scotland the names would be mainly of Teutonic origin.

It should be borne in mind that up to the unification of Scotland under Malcolm II, early in the 11th century, the

Lothians, Berwickshire and most of Roxburghshire were Northumbrian and therefore English-speaking. *Per contra*, the English counties of Cumberland and Westmorland used to form part of the ancient British kingdom of Strathclyde and were therefore Welsh-speaking. It may be worth noting here that the close resemblance between the name Cumbria for the north-west of England and *Cymru*, the Welsh name for Wales (pronounced Cumry), seems more than fortuitous.

But although there is a marked difference between eastern and western place-names, we cannot draw an absolutely hard and fast line between Celtic and Teutonic zones, nor make a perfectly clear-cut ethnographical map. For one thing, many of the older British names managed to linger on in the regions conquered by the Anglo-Saxons. For another, the "frontier" between the two races was subject to a great many fluctuations. As an example, when in 633 AD King Edwin of Northumbria was defeated by King Penda of Mercia and the Welsh chief Caedwallon, Northumbria came under Cumbrian (Welsh) domination. Within a few years Oswald had driven out the Welsh and regained his kingdom. Two generations later, Egfrith of Northumbria extended his western boundary to the Solway by conquering the "Land of Carlisle."

At a later date the situation became still further confused with the coming of the North-men. The Norse Vikings overran the north and west coasts of Scotland and the Western Isles. Further south they held the Isle of Man and invaded West Cumberland, penetrating far inland to the middle reaches of the Eden valley. Meanwhile the Danes raided, ravaged and occupied the eastern seaboard of England and southern Scotland, gradually supplanting the Angles.

This, then, in very brief outline is the historical background to the distribution of place-names of varying origins.

The terminations *-ton* (or *tún*), a village or township, and *-ham(e)*, a home, are the commonest and best-known in place-names of Anglo-Saxon derivation. They occur as frequently in south-east Scotland (e.g. Granton, Haddington, Swinton, Whittinghame, Tynningham, Ednam) as in Northumberland. In Cumberland they are rather more restricted, being found mainly in an area in the north of the county, from the coast

boundary at Gilsland westward to the Solway, as far as Workington.

Wick or *wich* is a Teutonic ending, meaning a village, and is found in all parts of Great Britain, from Sandwich in Kent to Lerwick in Shetland. From the latter circumstance I am inclined to think the word is of Scandinavian (cf. Narvik in Norway) rather than Anglo-Saxon derivation. Be that as it may, we have examples of it on the Borders in Alnwick, Bewick, Berwick and Hawick. Further to the North and West is Prestwick in Ayrshire, a county that was in the Norse "sphere of influence." Cumberland has Keswick, and rather significantly that part of the Lake District abounds in place-names ending in *-thwaite*, a Norse word for a clearing. *Tarn* (a small lake) and *fell* (mountain), so characteristic of the Lake District, are likewise of Scandinavian origin.

So too is the ending *-by*, meaning a village or town. The word survives in by-law, for a local town-law, as distinct from a Parliamentary enactment. As a place-name component, it is common in Cumberland, particularly in and near the Eden Valley (Scotby, Corby, Lazonby, Appleby). In Scotland it takes the form *-bie*: Lockerbie, Middlebie and Canonbie in Dumfries-shire, Humbie in East Lothian—to mention but a few.

Scottish and Northumbrian place-names give us the terminal *-hope* (a mountain valley), which comes from the Old Norse. *Thorpe* for a village, as in Hackthorpe (Cumberland) and Crackenthorpe (Westmorland), is essentially Norse. There are variants of it, as in *Staindrop* in Co. Durham and *Heythorp* in Oxfordshire; and on the Continent we find the Dutch *dorp* and the German *dorf*.

Shiel(d) and *scale* (or *Skail*) are respectively the Danish and Norse names for a shelter or temporary dwelling, such as a log hut, often in the hills on the summer pastures. These place-name endings are common on both sides of the Border. The Danish *shiel* is found in the names of countless farms in the Lammermoors. Galashiels and *Selkirk* are other examples. Then we find North and South Shields on the Tyne. In Cumberland the Norse variant occurs in Seascale and Wind-scale. (It is curious to think that, in the latter instance, the

Vikings' rude hamlet has graduated to an atomic power station !)

Holm, an island in a river or lake, or a low-lying meadow, is another Scandinavian word (cf. Stockholm, Bornholm), and it occurs on both sides of the Border. In Roxburghshire I can instance Denholm and Yetholm ; and it is very common in Cumberland (Holm Eden, Holme Cultram Abbey, etc.). There is a Holme in Lancashire near Carnforth ; and probably Hulme, as in Cheadle Hulme near Manchester, is of the same derivation. The Anglo-Saxon word for a riverside meadow is *haugh*, and we find it in Northumberland as well as in Scotland but with a difference in pronunciation. The Scots give the final *gh* a slightly guttural sound ; the Northumbrians pronounce the word " haaf."*

A rather uncommon ending of Anglian origin is *battle* or *bottle* for a dwelling. In southern Scotland there are Newbattle and Morebattle ; in Northumberland, Shilbottle, Harbottle, Walbottle. The word is clearly related to the German büttel, as in Wofenbüttel, near Brunswick.

Dun is the Celtic word for a fortified mound. While it is common in western and northern Scotland—Dumfries, Dumbarton (" fortress of the Britons "), Dunoon, Dundee, to give but a few examples—it is comparatively rare in south-east Scotland, where we do have Dunbar, Dundas and Duns. For the most part the original British word was replaced by the Anglo-Saxon ending *-burgh*, or its variants such as *borough* and *brough*. Thus *Dunedin* became *Edinburgh*. On the Scottish side of the Border we have Roxburgh and Jedburgh ; in Northumberland, Dunstanburgh and Bamburgh among others ; in Cumberland, Drumburgh and Burgh-by-Sands ; and in Westmorland, Brough-by-Stainmore. Here is another interesting example of the division between east and west, as shown by the differing pronunciation of *burgh* in the two adjoining counties of Northumberland and Cumberland : the former pronounces it as in Edinburgh, but Cumberland calls it " bruff." (When I first came to live in Cumberland it took quite an effort to remember that Edward I died at " Bruff "-by-Sands).

* The Cumbrians pronounce it " hoff " ; similarly they pronounce *heugh* as " huff " and *cleugh* as " cluff."

The Latin *castrum* (fortified camp) was anglicised to *-caster* or *-chester*, and its diminutive *castellum* gave us castle in English. The Welsh rendered *castrum* as *caer*, as in Caerleon and Caernarvon; while the Gaelic form is *cathair*, as in Cathcart. Now there are any number of "chesters" (in varying combinations) in the English Border counties of Durham and Northumberland; in Scotland too we find Bonchester and Chesters in Roxburghshire, Rochester and Whitchester in Berwickshire. To the west of the Pennines, however, there are, as far as I know, only Muncaster in West Cumberland and Lancaster and Casterton in Lancashire that show the anglicised form of *castrum*.

On the other hand, we find the Welsh *caer* in Carlisle (*Caer-luel* from *Castrum Luguwallum*). In Scotland, *caer* or *car* occurs frequently over a wide area, as far north as Perthshire, Angus and Aberdeenshire. In the Border counties we have examples in Caerlaverock in Dumfriesshire, Caerlanrig on Teviot in Roxburghshire, Carfrae (Mill) in Lauderdale.

The old Celtic names have survived in the Anglo-Saxon areas now under consideration chiefly in the names of natural physical features such as hills and rivers.

The Welsh and Cornish *pen* (Gaelic *ben*) for a head or peak is found in Penrith, Pennines, Pentlands, Pennymuir in the Cheviots, Penmanshiel in Berwickshire. In the last we have *pen-head*, *maen-rock* or stone, + Norse *shiel*: the shelter by the head or hill of stone. Pennymuir, interpreted as the head of the wall (*múr*) is the site of a Roman camp on Dere Street.

Cheviot is probably derived, as to its first syllable from the Welsh *cefn*, a ridge, and if so will be related to Cevennes, the range of mountains in southern central France.

Law, on the other hand is Anglo-Saxon. It occurs in the form of *low* as far south as Hounslow near London and as far west as Ludlow in Shropshire. It means rising ground, or simply hill. The *law* form is confined almost exclusively to south-east Scotland: from the Cheviots to the Firth of Forth it is widely distributed, being used not only for the names of individual hills but for farms and villages.

Fell, the Scandanavian word for hill, is most common in Cumberland, Westmorland and the Isle of Man. But it has

a secondary meaning, namely common pastures. In this connotation it is found not only in Cumberland but in Northumberland and Co. Durham.

Esk is Celtic for water, and several rivers in Great Britain bear the name. There are the Exe and Axe in Devon; the Usk in Wales; an Esk in West Cumberland and another, the Border Esk, coming down from Eskdalemuir to Longtown in the north of the county. East Lothian has its Esk at Inveresk, and in Angus there are Northesk and Southesk. (Even whisky has the same word as its root, being derived from the Gaelic *uisge*, water, and *beatha*, life).

Tyne: Besides the Tyne at Newcastle, there is a river of the same name in East Lothian, and there is also the Teign in Devon. The name is apparently of Celtic origin but its meaning is uncertain. W. J. Watson (*op. cit.*) connects the river-names of Tennet in Angus, Tynot in Banffshire, and Tanat in Montgomeryshire with the Old Irish *tene* or *teine*, meaning fire, which might be suggested by a rapid, boiling and turbulent stream. So Tyne *may* mean fiery stream.

Eden is the name of a big river in Westmorland and Cumberland (both county towns are on it) and of a smaller river in Berwickshire, a tributary of the Tweed. It would seem to be of Celtic origin, but again its meaning is quite obscure. It may be related to Edin, as in Dunedin. W. J. Watson (*op. cit.*) thinks it is not unlikely that we have the same word *Eidin* or *Etin* in Etin's Ha' (Eden Hall) the broch on Cockburnslaw in Berwickshire. He also refers to an old folklore story, "The Reid Etin," of a giant with three heads. Oddly enough, Chambers' Twentieth Century Dictionary (1960 edition) gives the archaic word *eten* or *ettin* for a giant, and its derivation through Old English *eoten* from Old Norse *jotunn*. It is conceivable, therefore, that the rivers Eden take their name from some legendary hero-god, Celtic or Norse. It is known that the Gauls, the Picts and the Celts of old regarded rivers and springs as divine; and in Christian times this pagan notion persisted in the connection of wells or streams of healing virtue with some saint or sanctuary.

The rivers Aln (at Alnwick), Ale (which joins the Tevoit at Ancrum) and Allan (a tributary of the Tweed between Gala-

shiels and Gattonside), possibly too the Ellen at Maryport in Cumberland, all derive their names, according to W. J. Watson, from the Celtic word *ail*, rock. He cites other examples of rivers Allan in northern Scotland, also the Alun in North Wales. The names of all these rivers will therefore mean "stony brook."

Adder in Blackadder and Whitadder (Berwickshire) might be of Celtic origin and in that case could be equated with the Adour in Cornwall, the Audr in Sussex and the French Adour in Gascony. Possibly the name of the Devonshire river, the Otter, is related to *adder* and its variants. But equally *adder* might derive from the Anglo-Saxon *edre*, an artery or vein, a fountain, a spring. Edrom in Berwickshire was possibly "Edreham" in its early days, which would lend colour to the theory of an Anglo-Saxon derivation for *adder*. Would it be too far-fetched, I wonder, to trace a connection between *adder* and Oder, the river of East Germany?

Smaller streams are called *burns* in Scotland and Northumberland, an Anglo-Saxon word, frequently occurring in southern England as *bourne*(e), connected with German and Dutch *born* and very likely too with German *brunn*(en), a spring. In Cumberland, where the Scandinavian influence was strong, the equivalent word is *beck*, as in Troutbeck, Caldbeck, etc., derived from Old Norse. The county boundary between Northumberland and Cumberland follows for some miles the Poltross Burn, which runs down from the Pennines into the Irthing at Gilsland, but as soon as you cross into Cumberland the brooks become becks. Beck is common too in Durham; and Northumberland has its Wansbeck, but this seems an isolated instance.

In Kirkcambeck, a small village in north-east Cumberland, we find a combination of Anglian, Celtic and Scandinavian elements. The middle component, *cam*, in Celtic languages means crooked or bent. It occurs frequently in Scottish place-names, chiefly in the Highlands. There is Cambo in Northumberland; and the ancient name for Birdoswald in Cumberland was *Camboglans*—crooked glen, from the big loop which the river Irthing makes here, a name which the Romans adopted when they built their camp, modifying it to *Camboglanna*.

Glen (Welsh *glan*), the Celtic word for a valley, is far commoner in Scotland than in northern England. True it occurs in Cumberland, as in Glenridding on Ulleswater. But here again the Scandinavian influence makes itself felt, and on both sides of the Pennines : a small valley or ravine is a *ghyll* in Cumberland and Westmorland, a *gill* in Co. Durham.

Another Scandinavian word is *dale*, for a wider valley, and it is widely distributed in northern England, and in southern Scotland as far north as Clydesdale.

Cum, which is the same as *cwm* in Wales and *combe* in Devon and Dorset, means a hollow in the hills. (British mountaineers have even transplanted it to the Himalayas, where a deep valley in the approaches to Mount Everest has been named "Western Cwm.") I find no instances of it in Scotland, unless possibly Cumledge in Berwickshire ; but in Cumberland there are half a dozen villages within ten miles of Carlisle that have *cum* as the first component of their names.

Before concluding I should like to mention some of the Celtic place-names that have persisted, like erratic glacial boulders in low-ground pastures, in the Anglo-Saxon zone of south Scotland. Dunbar, "summit fort," and Drem, from *druim* or *drum*, a ridge, are cases in point. In Tranent we have *tra* (earlier forms are *traver* and *trever*) derived from the old Celtic *treb*, an abode. The Welsh and Cornish equivalents are *tref* and *tre*. Threave, whose castle was once a Douglas stronghold in south-west Scotland, is another form of the same word. The second component, *nent* or *nant*, means a brook or dingle. Thus Tranent means the dwelling by the brook.

Dalkeith is from *dal*, a meadow, and *keth*, a forest or woodland ; Pencaitland from *pen*, hill—*caith* (a variant of *keth*), forest—*land*, originally *lann*, which was in the first place an enclosure or clearing but came in time to mean a monastery or church within the enclosure.

Melrose is capable of two interpretations. *Ros(s)* in Gaelic is a promontory or cape, but in Welsh and Cornish a moor. *Mel* in the one case means blunt, in the other bare ; so Melrose may mean blunt promontory or bare moor, according to whether it is of Welsh or Gaelic derivation. The latter seems to be more likely in view of its geographical situation, *i.e.*, in

the British (Welsh-speaking) and not the Gaelic part of Scotland.

Finally I should like to deal with the somewhat tortuous derivation of Kelso. The earliest form of the name was *Calchvynydd*. *Calch* is chalk or lime, while the second half is a variant, by virtue of one of those mutations that occur so often in Celtic tongues, of the Welsh *mynydd*, a mountain (cf. *monadh* in Gaelic). At a later stage, after the coming of the North-men, *mynydd* was translated into the Scandinavian *heugh* or *how*, a height, so that *Calchvynydd* became *Calchow*, meaning chalk-hill, and the latter eventually degenerated into Kelso. I think we may safely assume that the chalky eminence refers to Pinnacle Hill, where incidentally a late Bronze Age kist was discovered.

For the derivations which I have given I have relied largely on W. J. Watson's "History of the Celtic Place-Names of Scotland" and on the Oxford Dictionary of Place Names (1935). The latter, however, only gives place-names of England. The 1936 edition of Chambers' Twentieth Century Dictionary has a most useful section devoted to the Etymology of Names of Places etc. I wish to express my sincere thanks to Miss K. S. Hodgson, F.S.A., the noted Cumberland Archaeologist, who from her wide knowledge and experience gave me invaluable advice and guidance; and to Miss Claudine Murray whose knowledge of Northumbrian history, folklore and dialect was very helpful.

POSTSCRIPT

Since writing this paper I have been in correspondence with a friend in Pembrokeshire, Mr. L. S. Sutton, who has made a close study of place-names in Wales. He confirms the assumption that I have already made, that names of Rivers, almost anywhere in Britain, are for the most part of Celtic origin.

With regard to EDEN as a river-name, I was very anxious to know if it occurred in Wales and he finds that in addition to the Cumberland and Berwickshire Edens, there are rivers of the same name in Fife, Yorkshire and Merionethshire. (The Kentish Eden may be ruled out, as the name is a back-formation from Edensbridge, which in its earliest form was

Edehwulves Bryg). "It seems reasonable (he writes) to seek a common Celtic base for a so widely-dispersed river name as this; and it seems probably to lie in the following manifestations: Old Irish *ith*. Old Welsh *it*, Welsh *yd* (pronounced "eed"), Cornish *ys*, all carrying the connotation of "corn." Thus a river which watered a fertile plain might easily attract a name with such a sense." It may be worth noting too that the modern Welsh word for an ear of corn is *eden*.

It seems a far cry from corn to the legendary "Red Etin." But, it occurs to me, could Etin, the giant hero-god of the ancient peoples of northern Europe, possibly have been a god of fertility, comparable with the Corn King of the Scythians? This may be a wild and untenable hypothesis, just waiting to be demolished by philologists and anthropologists, but I put it forward for what it is worth.

I should add, too, that the Anglo-Saxon derivation I have suggested for Edrom is open to question. Mrs. Logan Hume tells me that according to another school of thought the name means "between the ridges," the second component being the Celtic *drum*, a ridge. As so often happens in the case of place-names, one guess is as good as another and I would be the last to dogmatise about the origin of the name. Through the centuries all place-names have undergone countless modifications, many of which are due to the vagaries of mediaeval spelling.

THE DEVIL'S CAUSEWAY AND THE BREMENIUM-THRUNTON BRANCH.

By R. H. WALTON.

The whole system of Roman roads in Northumberland was surveyed most accurately in 1857 to 59 by Henry Maclauchlan, on the instructions of the 4th Duke of Northumberland. From the invaluable set of maps and notes published by the Duke, we may follow the course of the various roads with certainty although, in the case of nearly all of the "Eastern Branch of the Watling Street," as Maclauchlan calls it, or "The Devil's Causeway," as it is known to-day, very little is recognisable on the ground nor does much of the road-way lie exactly underneath any modern road.

So little is known of the origin and purpose of the Devil's Causeway and its cross-road to Bremenium that it has been suggested that it was never finished, let alone put into use. The characteristic proof of use of Roman roads seems to lie in the existence of pits, sometimes quite deep, alongside the road. From these pits was dug the earth which was spread on the road during the summer months to replace that which had been washed off during the months of rain and snow. Exactly the same pits can be seen alongside the minor roads of India at the present day and the work of re-surfacing the road (without benefit of steam-roller) can be witnessed, being carried out in much the same manner as that which might have been seen in Roman times.

A visit to Dere Street between Pennymuir and Whitton Loch will reveal these pits along the west side of the road.

As far as the Devil's Causeway is concerned, I have seen no traces at all of soil pits either on it or on the Bremenium branch and, where the road bed is visible or has been ploughed up, no sign of any other material than pure earth can be seen. It is possible that this was the surface provided. Indeed, such a surface, properly maintained, might serve very well

if the only traffic was that of horsemen. For wheel traffic earth would hardly answer. It is a matter of opinion, therefore, whether or not there is sufficient evidence to prove that these roads were, in fact, put into use and no evidence at all to provide a date for this use.

To revive interest in the Devil's Causeway and to provide a check on its present state, the following observations have been made in the course of the last year.

As a result of the recent discoveries at Otterburn, it has been possible to pin-point the tiny battle-field of Hedgely Moor and confirm that it was fought almost exactly on the line of the Devil's Causeway, across which a stone and earth dike was erected at the time as an obstacle to the mounted men of the Yorkist forces. In brief, a small force of Lancastrian sympathisers commanded by Sir Ralph Percy barred the way of a similar force of Yorkists, commanded by Lord Montague, Warden of the Eastern Marches, coming from the South when they had reached a point about two miles north of Powburn on the Morpeth-Wooler road. The battle took place on April 25th, 1464, and almost the whole Lancastrian force was killed, including Sir Ralph Percy.

The graves of the slain are to be seen behind the earth dike which is, itself, built across the line of the Causeway and which extends from the edge of a marsh to the east and reaches to what must have been the edge of a wood to the west. The stones from the dike have been taken to cover the bodies. If this is correct, it means that the Causeway was in use in the fifteenth Century at this point, at least. The road-bed has been found in the front garden of the cottage beside Percy's Cross where Sir Ralph died after the battle.

The Bremenium cross-road, traversing a long stretch of what was, until recently, unrelieved or improved moorland, is still visible on the ground in a few places and can be traced by probing elsewhere at a depth of from six inches to a foot.

Starting from Bremenium, the course of the road is hard to find until you are within sight of Stewartshields farm. From here, it shows up well where the stones have been dug up on the lines of several cross drains. It appears to have been lifted

in the Stewartshields hay-field but beyond, at the Air-strip, it was exposed last year in the course of engineering operations. Near Countess Well, where the road crosses the mediaeval Drove-road from Elsdon to Cottonshope, now tarred, traces of a fire and occupation were found at a depth of about five feet.

The road is clear from here to Branshaw Peel, a ruin of great antiquity. From the Peel, the road can be followed over the moor to Yardhope and was, until recently, used as a peat road from Stewartshields.

Just short of the Dovecrag Burn at Campville, Forestry Commission ploughing has uprooted about a hundred yards of the road, which now stands out very clearly, although the stones are roughly laid and of no uniform size. Maclauchlan noted that this road had a central raised portion. I have never seen this in evidence. At the crossing of the Dovecrag Burn, one would expect to find traces of a bridge, but this minor road may not have merited such an elaborate provision.

From the entrance gate of Campville, the road can be seen in a new drain at about a hundred yards from the gate and can be found by probing as far as the first cultivated field reached, at the far side of which is the famous Lady's (or Ladies') Well. The road has been uprooted through the field, but re-appears where it runs in a gully down the bank to join the flat Coquet valley opposite Sharperton. The river was certainly crossed by a ford, but the course of the road on the other side is conjectural. Maclauchlan found the first real evidence near the top of a wooded hill to the S.W. of Sharperton Edge farm where Greenwood's map of 1828 shows a "camp," which camp was also reported by Mr. Smart, of Trehwitt, in 1826.

From here, the road runs straight to the Burradon-Wharton road to cross it to the north of a small wood, the site of Burradon East Bank house. In descending the long hill from Sharperton Edge, it cuts across the end of a tree-lined field road, the old Sharperton-Burradon road, and does not run on it as shown in the 1" O.S. Map. The Foxton Burn is crossed by a ford, but a few yards lower down the burn there are several rectangular stones five feet long, in each of which are

cut three " L " shaped slots similar to the cramp holes in the foundation stones of the Roman bridge at Chesters. It remains for expert opinion to decide if, indeed they are Roman and if so, whether this is the site of a bridge.

The road is to be found by probing most of the way up the hill-side as far as the road. Beyond the road, it is not to be found until the curb appears diagonally in a gateway half-way to the long wood on the crest of Ewe hill overlooking the Wreigh Burn. In this wood, the road consists of a short section of the full surface standing up well, and is to be found under a rhododendron bush. Beyond here, the road has gone and the crossing place over the Wreigh Burn is indistinguishable. Beyond the Wreigh Burn, I have not been as yet, but the foregoing notes may help anyone interested, and who, with the aid of a map, preferably a 6 inch map, would like to look for the additional traces which must be there waiting to be found.

A CUP-MARKED STONE IN THE ROMAN TOWN OF CORSTOPITUM.

By R. H. WALTON.

Visitors to Corstopitum have enough to do besides look for oddities, but there is one peculiar thing to see there, the existence of which is not mentioned in the guide book. I refer to a large and bulky stone which some tidy excavator has lifted up onto the magnificent first tier of the unfinished wall of the great store-house. This stone is innocent of charm or elegance ; a bumkin amongst city-dwellers.

Its only claim to fame is the fact that its upper surface and part of its sides are covered with a large number of man-made pits and an irregularly drawn groove roughly encircling the majority of them. As the whole design is completely unsymmetrical and without order or reason of any sort, it is only too easy to put it in touch with its relations.

Its half-brother, at least, can be found on the hillside a hundred yards to the west of Lordenshaws Camp, on Garleigh Moor, to the south of Rothbury. There, there is a piece of bed-rock, covered with small cups or pits, and these are partially surrounded by a roughly horse-shoe shaped groove.

Similar designs can be found elsewhere, though not so common as my remarks may suggest. What they were for or when they were made, we do not yet know. It seems beyond doubt that the Corstopitum stone antedates the town itself and that it was in full view at the time of the building of the town and was not broken up for the foundations. We may make what we like of this. We may suggest a religious significance or merely a whim on the part of the building contractor and his gang. Only the other day, gang after gang of Irish labourers was dismissed rather than agree to put an air-port runway across some thorn trees which they considered to be free from interference—even in the cause of "Progress." Perhaps the British workmen thought the same thing, in 200 A.D.

A GROUP OF CUP-AND-RING MARKED ROCKS ON GOSWICK SANDS.

By R. H. WALTON.

The subject of Cup-and-Ring marks should be familiar to all our members. These marks occur all over Scotland, Northumberland, and, in fact, throughout the British Isles. Their age and purpose are still a matter of opinion. Whilst a very large number of groups of marks have been located and recorded, there is always the possibility of new discoveries.

In June, 1959, my wife and children were on Goswick Sands where the Scremerston rocks begin. The children were the first to notice circles inscribed on some of the many earth-fast sand-stone rocks projecting from the sands just below high-water mark. The whole coast-line of Northumberland is subject to constant movement of sand, this movement seeming to be in a southerly direction. It just so happened that, in the summer of 1959, the sand at Goswick had receded, leaving the rocks showing to a greater depth than usual.

In all, I counted twelve distinct sets of concentric circles on various rocks. The bed-rock at this point is of course sandstone, much laminated, and this lamination coupled with erosion has produced a large number of natural rings surrounding harder knobs of rock of different sizes.

At first, I thought that the concentric rings were also natural, but close examination of one set, less worn than the others, showed very clearly the characteristic peck-marks of the tool with which the rings had been made.

I took a set of photographs whilst I was able to do so. This proved a wise move, because, within a few months, the winter storms washed the sand back over the beach and now it is possible to see one only of the group of twelve.

The remainder must now be some feet under the sand. To me, these marks have special interest, in view of the curious fact that, unlike any others recorded, the centres of the circles are convex. The only possible reason for this seems to me to be traceable to a desire on the part of the artist concerned to copy the natural configurations of the adjacent laminae.

Is it possible that ALL cup and ring marks stem from a desire on the part of some ancient peoples to multiply in duplication natural rock formations to which they ascribed some special virtue ?

THE CATRAIL—ANOTHER THEORY.

By R. H. WALTON

The Catrail, as everyone knows, is an earth-work consisting of a bank and ditch, the latter even to-day as deep as twelve feet in places. This earth-work is formed in disconnected lengths and winds in an aimless manner across some of the roughest country possible. The total distance covered by the Catrail is about thirty miles. It starts nowhere and ends nowhere, as far as modern habitations are concerned. When viewed in relation to adjacent camps and forts, a different picture presents itself. There is a heavy concentration of camps around the central section of the Catrail and on its northern side. At either end, few camps are to be found.

The questions which have been posed concerning this earth-work are : Who built it, when and for what purpose ? The most important question is : What is it supposed to be ? Is it a road, a barrier, a demarcation line or what ?

Countless theories have been advanced. One, with no less merit than the rest, suggested with great assurance that it was a wolf-trap ; the wolves being driven across country until they reached the trench of the Catrail into which they ran for shelter. At the end of each section was some sort of trap in which the wolves were caught.

One thing seems certain and that is that the Catrail, although much has been obliterated in the course of time, was never a continuous work. If so, it could not have been a road and it is unlikely for the same reason to have been a demarcation line. As a barrier or defensive work, its lack of continuity appears, at first glance, to render it ineffective. To-day, certainly, apart from the roughness of the country in between each section, there is no special obstacle to an advance across country by men on foot. As, however, no work of this magnitude would be undertaken for nothing, we should look

for some reason which was apparent at the time of its construction.

It will be clear that no earth-work of any length can present a serious obstacle to men on foot. To a horse-man, such an earth-work, even lightly defended, might be impassible. Continuous or linear earth-works were a common feature of warfare throughout the Middle-ages after the general introduction of the armoured war-horse, and the armoured knight and man-at-arms. With this certain knowledge, we may consider whether or not such earth-works were used at a still earlier date for the same purpose.

There is no direct evidence that the native population of Britain as a whole used linear earth-works to hinder the advance of the light Gaulish cavalry used in the first stages of the Roman invasion and occupation of Britain. It is probable that this cavalry was not trained to charge in the style of the heavy cavalry of the later years of the Empire.

The Saxon invaders seemed to have fought on foot in the actual battle. When the Saxons themselves were faced with the Great Army of the Danes, massive and numerous earth-works were constructed, especially in the time of Alfred, whose worries about man-power were increased by the necessity of finding both "Sword-men" and "Spade-men." The Danes always provided themselves with horses, usually from East Anglia where they landed and where, presumably, there was a friendly element. These horses were used simply as a means of getting about and there are no records of classic cavalry charges.

The arrival of the Normans, with their war-horses and tradition of the armoured horseman, a legacy of the heavy cavalry of the late Roman Empire, itself derived from the Gothic mounted archer, began a new phase of warfare in Britain.

The constant wars which raged throughout England and Scotland for the next five hundred years were fought using the special advantage of the armoured knight (and the armoured war-horse) over the relatively unarmoured foot-soldier. It was only the introduction of the use of fire-arms which neutralized the effect of the armoured horse-man.

Heavy cavalry employing the charge, disappeared as a feature of the battle-field towards the end of the fifteenth century only to reappear in the seventeenth century in the form of, first Prince Rupert's and then Cromwell's heavy cavalry disciplined to charge together, in line and with the sword as their weapon.

Throughout the middle-ages, continuous earth-works as a defence against cavalry were the recognised thing on every battle-field. They were erected wherever the cavalry of one side or another was inadequate to deal with the opposing cavalry, or where the force on the defence was composed entirely of foot-soldiers or were a mere rabble. The horseman was compelled either to dismount or, if he tried to force his horse over the obstacle (which was often only a low bank of earth) to expose the unarmoured belly of the horse to the spears or bills of the enemy.

If I have offered some explanation of the purpose of some long earth-works and if this explanation can be applied to the Catrail, there is still the question of the lack of continuity in this particular case.

An examination of the sections of the Catrail as they stand to-day, will show that some sections terminate either at a stream or at the foot of a hill of considerable steepness.

There are places where neither of these conditions exist. An examination of another famous "Dike" in Scotland, the "Deil's Dike" in Ayreshire, shows the same style as the Catrail as to lack of continuity. The reason for this feature can be found by an examination of the famous "Dikes" in the South of England whose history is well known. Bokerly, Dike, near Cranbourne Chase, shows that this earth-work was intended to cover the open country between the former forest of Cranbourne Chase and the adjacent forest of Netley or Natanleah. Grimsdike, beside Wychwood forest, covers the open ground between the forest where it skirts the river Evenlode and the other branch of the river, the Glym.

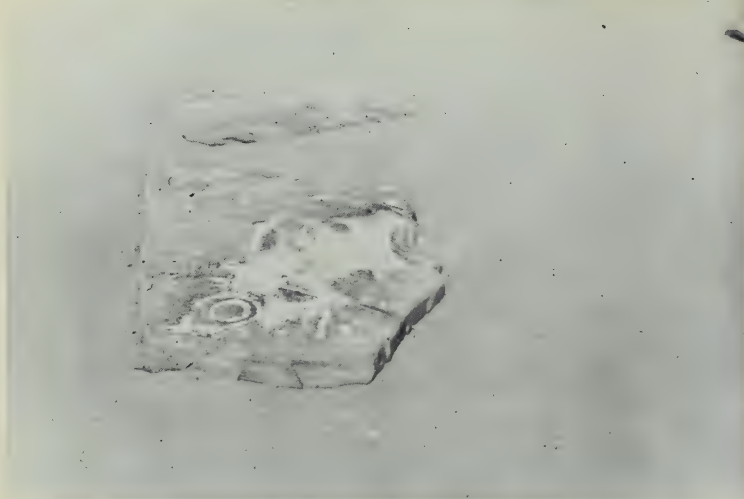
Other examples from the Southern Counties could be cited and it seems clear to me that, where the country was favourable to the passage of cavalry or mounted men, and where such an advance was to be prevented, earth-works were dug



Cup marked stone.



Cup marked stone.



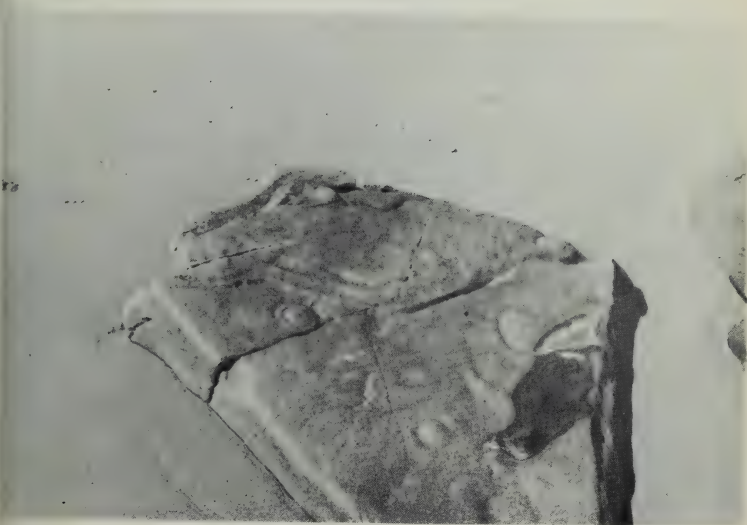
Cup and ring marked sandstone rocks, Goswick Sands.



Natural "Rings" formed by erosion of laminated sandstone, Goswick Sands.



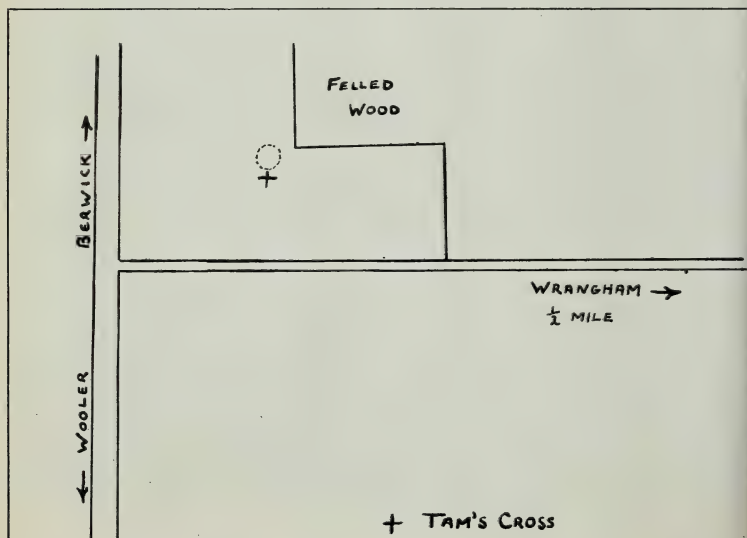
Cup and ring marked sandstone rocks, Goswick Sands.



Cup and ring marked sandstone rocks, Goswick Sands.



"TAM'S CROSS," WRANGHAM.



to cover all open ground between natural obstacles such as virgin forest and impassible river valleys and steep hillsides.

Travel across country in Prehistoric and even Dark-age England and Scotland presented much the same problems as travel in, say, the western parts of North America in the last century, of which we have eye-witnesses accounts. There, oddly enough, it was the trails of wild animals which were followed, those of the famous buffalo. These trails led, with unerring accuracy, not along the narrow and rough valley bottoms, but over the dry and open watersheds between the various branches of the rivers. In the more mountainous parts of England, Wales and Scotland, the main trackways do just that and it is on these tracks that we meet with the cross-earth-works which were erected at some time in the past as a simple and effective block to horse-men. Such earth-works were easily defended if defence was necessary. An example comes to mind on the Border, close to the farm of Kelsoeleugh, where a bank and ditch blocks one of the main tracks across the Border.

The Catrail may have been, therefore, a chain of defensive "blocks" linking natural obstacles such as river-beds, steep hills and the natural forest which we may be sure, covered much of Scotland until the end of the Sixteenth Century.

The great forests of Scotland have gone for ever, to be replaced in part by the tame, neat blocks of the Forestry Commission. Perhaps, one day, these same forests of the Commission may become as wild and unrestrained as those of our ancestors and bar the way to the nomadic survivors of the Atomic Age.

TAM'S CROSS, WRANGHAM.

By W. RYLE ELLIOT and R. H. WALTON.

In the summer of 1958, Ryle Elliot and myself were at the farm of Wrangham, a mile or so to the north of Doddington village in Northumberland. We were looking for cup-marked stones which were to be found in the vicinity. In the course of conversation with the steward, we were asked if we knew the "Warrior's Grave." Much intrigued we said, "No," and were directed to a spot in a field about two hundred yards from the Wooler to Berwick road and a hundred yards from the by-road to Wrangham.

Here we found a low mound of pure earth denoting a stone cairn robbed of its stones and replaced by the sand and mould which had formed in and amongst the stones over the centuries. Beside the mound was a large, shallow cross-socket with a square hole in it and near by a much eroded section of a cross-shaft.

Exploration of the mound, which was much broken up by an old rabbit-earth, produced more sections of the shaft to make up, in all, no less than six feet. This is a very satisfactory amount to recover. Usually nothing remains but the socket. It was too much to expect to find the fragments of the arms of the cross.

Everyone knows that, in the reign of Edward VI and as part of the process of nationalizing the Church, an order was made to destroy all crosses, whether in shape or image (hence the dearth of grave stones prior to that period). The process was gradual, simply because the task was a considerable one, and from time to time one comes across somewhat testy complaints from official travellers that the job had not been done properly. It is likely that the more inaccessible crosses were left to the last. Some, like the magnificent crosses at Bewcastle and Ruthwell, were buried to prevent their destruction.

The "Warrior's Grave" may simply be a wayside cross, located beside a tumulus, or it may be directly connected with the tumulus. Nothing is known about its origin. It does not appear on the one inch Ordnance Map. On the other hand, in McLauchlan's wonderful "Survey of the Eastern Branch of the Watling Street," the cross is marked as "Tam's Cross," with the note that "Tam" signifies its association with or location by a tumulus.

On behalf of the Berwickshire Naturalists' Club, Mr. Elliot and I are pleased to be able to publish, for the first time, the details of this interesting monument.

SOME FRESH LIGHT ON THE ANGLO-SCOTTISH LORDS OF LEITHOLM AND STRICKLAND

By RUTH DONALDSON-HUDSON, B.A., F.R.Hist.S.

It will be remembered that the 1960 *History* (Vol. XXXV, Part II) gave an abstract from a paper on the origins of the De Lethams and Stricklands, written by Mr. G. H. S. L. Washington, M.A., F.S.A., and first published in the Cumberland & Westmorland Archaeological Society's *Transactions* (1960).

He then believed that Ketel, first lord of Leitholm of that name, who was also enfeoffed of Great Strickland in Westmorland by a grant from William de Lancaster, lord of Kendal, was the son of a certain Dolfin who married Maud, a daughter of Gospatric I Earl of Dunbar. He had identified this Dolfin with Dolfin fitz Ailward, but later researches have led him to the conclusion that Ketel's father was probably Dolfin fitz Uctred, the forbear of the great house of Neville. For this change of view he adduces three pieces of circumstantial evidence.

In the first place the various children of Dolfin fitz Ailward and Maud of Dunbar are enumerated in the *Register of St. Bees*, yet Ketel's name does not appear. (Cf. Wilson, *St. Bees*, Surtees Society 317).

Then, Dolfin fitz Uctred, of whom very little is known, is nevertheless recorded as holding Staindrop, Co. Durham in 1129 and 1131 of the Prior of Durham. At his death before 1141, Staindrop (*i.e.* Raby) passed to his eldest son Maldred fitz Dolfin, whose son Robert fitz Maldred married the heiress Isabella Neville. It is to this marriage that the mighty feudal family of Neville and their descendants, the extant line of the Abergavennys, trace their lineage. To return to Dolfin fitz Uctred, he reserved his homage to the Kings of England and Scotland and to the Bishop of Durham.

There are two significant points here. One is that the Berwickshire monastery of Coldingham, in whose chartulary the names of Ketel son of Dolfin *de Letham* and of his later heirs occur, was actually a cell of the great priory of Durham.

The other point concerns the lineage of Dolfin fitz Uctred. Canon Greenwell suggested (*History of Northumberland* vii, 1904) that Uctred was the son of Maldred, a brother of Gospatric I, and thus both of them sons of an earlier Maldred, Prince of Cumbria, a brother of King Duncan I of Scotland. Sir Anthony Wagner, Garter King of Arms, commenting on this theory says that the repetition of names (Dolfin's *known* family were Uctred, Dolfin, Maldred and Patric, reflecting the names in the Dunbar family) makes some close relationship likely, though it may have been through the female line (*English Genealogy*, 1960). Inconclusive though the evidence may be for Dolfin fitz Uctred's descent from a brother of King Duncan, it remains significant that Dolfin should have reserved his homage to the Kings of Scotland as well as those of England.

It seems that Dolfin fitz Uctred held Staindrop by right of his wife, Alice, who was the daughter or niece of Ranulph Flambard, Bishop of Durham. Ketel, who became lord of Leitholm, was (probably) a younger son of Dolfin and Alice.

Mr. Washington suggests that Ukil son of Maldred, and presumably brother to Uctred, who witnessed Berwickshire

charters of Earl Gospatric II before 1138, may have been an earlier holder of the manor of Leitholm, where his probable great-nephew Ketel followed him eventually. After quoting from Mr. G. A. Moriarty's paper on "The Origin of Nevill of Raby," which shows that the manor of Winlaton, near Blaydon, Co. Durham was held by one Maldred *circa* 1082-4 and long continued to be held by the descendants of Dolfin fitz Uctred, he goes on to say: "If Maldred of Winlaton had possessed Leitholm too . . . then the descent of the Nevilles—not to mention that of the first thanes of Leitholm and Great Strickland—from the great house of Dunbar (which was a branch of the ancient royal line of Scotland) need no longer be doubted."

The pedigree which I appended to Mr Washington's first article needs additional revision in respect of the De Lethams. It will be remembered that Dame Christian de Letham, born c. 1165, married Walter fitz Adam, and it was their great-grandson Sir William de Strickland who married Elizabeth d'Eyncourt, heiress of Sizergh, and thereby became the ancestor of the Stricklands of Sizergh. It would now appear from chronological data that Christian was *sister* to Uctred of Great Strickland and Ketel II of Leitholm rather than daughter to Uctred, as shown in the earlier pedigree.

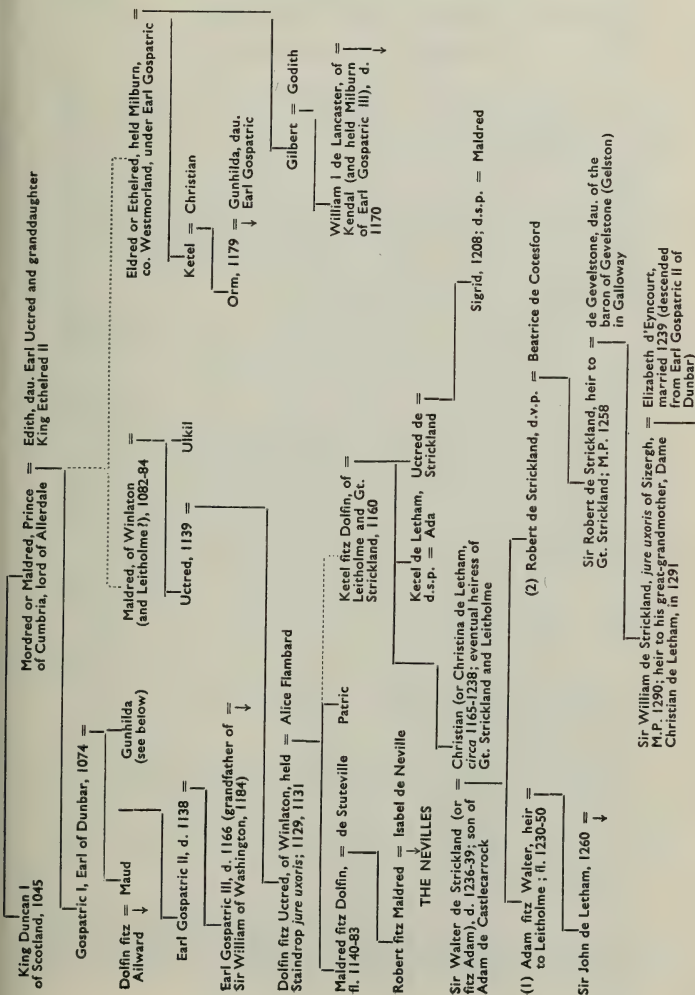
The elder brother Ketel II, *fl.* 1180-1200, husband of Ada, died without issue. The next appearance of a De Letham in the chartularies of Coldingham is that of Sir John, son of Adam fitz Walter who was the elder son of Walter fitz Adam and Christian his wife. A later John de Letham, presumably a descendant of Sir John fitz Adam de Letham, was granted by King Robert III in 1403 the lands of Leitholm, the superiority of which had come into the King's hands by the "forfaultrie" of Earl George, cousin and successor of Patrick of Dunbar.

Meanwhile Christian's younger brother Uctred, lord of Great Strickland, had only one daughter Sigrid, who must have died childless. Consequently Christian became the eventual heiress to the Strickland property as well as inheriting Leitholm from the other brother Ketel. Leitholm went to her elder son, Adam (as noted above), while Strickland was left

to the younger son Robert. He was the grandfather of Sir William de Strickland, who became lord of Sizergh in right of his wife.

Finally we may notice that Ketel (I) fitz Dolfin of Leitholm was in some degree related to the De Lancasters of Kendal, under whom he and his heirs held Great Strickland. Orm, who was cousin to William de Lancaster, was married to Gunhilda, a daughter of Earl Gospatric I. Orm and his cousin were grandsons of Eldred (living in the late 11th century), and it is very possible, although not proven, that Eldred also derived from the princely house of Dunbar.

I am extremely grateful to Mr. Washington for his kindness and courtesy in allowing me to use his material, the results of his researches, and to give a summary of them here. I have also been able to reproduce the genealogical tree that he published with his paper. This sets out very clearly both the family and tenurial links between Leitholm and various manors south of the Border.



BRITISH ASSOCIATION REPORT, 1962.

By MRS. M. H. McWHIR.

The 124th Meeting of the British Association for the Advancement of Science was held at Manchester. It is nearly half a century since the British Association met in the Industrial Metropolis of the West Country.

At the inaugural meeting which ushered in this busy and memorable week—held in the City's Free Trade Hall—four distinguished officers of the Association had honorary degrees conferred upon them; midst the colour and pageantry that would have befitted a state occasion.

An overflow audience was held in the Albert Hall at the opposite side of Peter's Street. They saw even a more vivid version of the proceedings on colour television.

Professor R. A. Oliver brought smiles to all, as they stood gowned and resplendent, before the Chancellor of Manchester's University, Lord Woolton. Professor Oliver, referred to the fact, that one of them, Sir Wilfred Le Gros Clark, immediate Past President of the British Association, had been tattooed on his left shoulder during his initiation into the Tribe of Sea Dyaks as Great White Chief of the "Witch Doctors," and that Lord Rennal (former General Secretary of the British Association) had won a much prized place as honorary Sergeant in the French Camel Corps, during explorations in the Sahara.

The Lord Mayor, Alderman R. E. Thomas, then welcomed the Association to the City of Manchester. He concluded his able and interesting speech by remarking that the City's educational facilities were second to none.

Thereafter, Lord Rennal and Professor P. M. S. Blackett, were made Honorary Doctors of Law. The latter also being a Past President of the British Association. Then Sir Lee Gros Clark and Professor Dame Kathleen Lonsdale (General Secretary) of the British Association, had Honorary Doctorates of Science conferred upon them.

Sir John Cockcroft, in his Presidential Address, made a moving plea for Peace, to scientists. His address was entitled "The Investment of Science." He said a very great contribution which Investment of Science could make to human

welfare in the future depended on achieving a reasonable degree of political stability in the world. The Professor said, the development during the last year of bombs, which could destroy by heat alone, everything within a radius of 20 or 30 miles below the point of "burst" had carried the world still further along the road to destruction. He continued, however, that the great difficulties of achieving disarmament are political not technical, and if there was real will on the part of all major powers, it could be accomplished, and thereby releasing enormous resources for diversion of the urgent needs of our own country and to other far less fortunate parts of the Globe. He continued, that space ventures were being undertaken mainly for prestige reasons, and as an instrument of Power Politics, and thus seriously diverting large numbers of engineers and scientists to these objectives, and said he, we must sadly conclude that world priorities have also gone badly wrong.

The President concluded by saying, we had not only to double the proportion of our applied research by making an effort to further the development of new products and new industries, and less to trying to maintain the position we had held in the world in the past.

As usual, during this most interesting week, I attended as many lectures as possible and as there were 290 speakers, one found it rather a puzzle which to attend.

The President remarked how satisfied he was by the attendance of 5,303 members, which he told us, had only been surpassed by the Centenary meeting in London.

He also spoke happily of the young peoples' interest. "Indeed, said he, I went to one of their meetings in the Great Hall of the College and there was not one vacant seat."

Sir Eric Ashley, President for 1963, remarked that it was a sign of the combined interest of the British Association to the needs of our society that the Association should have a President in Manchester who was one of the great Architects of this new age of technology and that amongst the Presidents of Sections, there should be so many men, whose work is familiar, wherever science is studied.

In the Corresponding Societies' Annual Report, a meeting under the Chairmanship of the Earl of Cranbrook, C.B.E., came

to the conclusion that it would be wise if the Societies throughout the country endeavoured to attract young people as members. Tremendous enthusiasm was shown at the meeting and a preparatory Committee has already begun to work in conjunction with the Officers of the Council.

Another meeting I attended during this very hectic week was entitled "English—the growing link between peoples." It was said that English was gradually becoming the language of the World. This subject was the theme of Professor Bruce Pattison's lecture (of the Institute of Education) at the University of London, when he gave his Presidential Address to the Educational Section. "In a little more than a generation," he remarked, "talking to people on the other side of the World had become a commonplace." He said, "there was a new consciousness that what happened anywhere might concern everyone the world over. The problem of finding a common language was more wide-spread and urgent than ever before." "The obvious solution, he went on to say, "is a world language, since the whole universe is involved."

By common consent this year's Conference has been one of the happiest and most brilliant within the memory of any of those present.

A comprehensive vote of thanks was given with the utmost sincerity for the magnificent entertainment and hospitality of the City; the wonderful organization of all the arrangements, and the kindly personal informality of the Civic Leaders, and the ready co-operation and courtesy of so many, made the 1962, British Association Meeting an outstanding success. Also contrary to all expectations, the Weather Clerk gave us almost continuous sunshine.

As usual there were many varied and interesting excursions. A most instructive and enjoyable afternoon was spent by a company of us being taken over Christie's Hat Factory. Members of this party will not readily forget the kindly hospitality meted out to them by the owners of this famous firm. We were most painstakingly lead through the whole intricate process of hat-making from start to finish. We were shown a hat that had been made for Queen Victoria and were given most interesting histories of the visits of present-day

Royalties. The Queen Mother had evidently charmed everyone by her great attention and interest in the complicated process of hat manufacture.

Another very enjoyable excursion was made to Alderley Edge by Section X. The object of the outing was to see something of the scenery of the Eastern part of Cheshire Plain and also the Western Pennines, and to note its dependance on underlying geology. Our party made a brief stop on the summit of Alderley Edge to view the wide-spread and extensive countryside, the beauty of which was greatly admired, and many photographs were taken. The surrounding rocks, we were told, were notable for their mineral content; and copper has been mined here almost continuously from pre-Roman times.

The coach took us through Macclesfield with its fine early 18th Century Parish Church. We passed through most lovely country, and as we climbed to the high moorland we noticed that the grit had formed the stones into many curious shapes, also on the numerous isolated rocks lying around.

A halt was made at Park House Hill to collect fossils peculiar to that part of Cheshire.

The coach, on our return journey brought us over a most lovely moorland road via Buxton. One could not help thinking what a desolate and remote spot it would be in a snow-storm.

On Sunday morning the Official Service was held in Manchester's beautiful and ancient Cathedral. The Bishop, Rev. W. D. L. Green, preached on the "Conflict of Science and Religion." In the course of his sermon he remarked "science concerned itself with the outward and the temporal, and its language was mathematics; whereas Religion dealt with faith, the inward and the eternal, and its language was poetry—both were areas of true knowledge and both were essential to human life."

The congregation stood until the usual colourful procession of Clergy, Civic representatives and Scientists left the Cathedral.

The 1963 Meeting has been arranged to take place in Aberdeen.

REMARKABLE THUNDERSTORM AT HARDENS, DUNS

By Rev. Canon A. E. SWINTON of Swinton.

I sent a Thunderstorm Survey report form to Major Deas of Hardens Hill and he kindly supplied the following information.

On December 13th, 1962, the farmer at Hardens had just returned home at 1 a.m. when, although the weather had seemed fine there was a very heavy hailstorm, some stones of $\frac{1}{2}$ inch diameter coming down his chimney. As he went out to see this he saw over Hardens Hill House a terrific flash with a bright centre, instantly followed by what he called "an explosion." Major Deas writes: "I woke up with the hail and saw the flash and heard the explosion. I found our whole electric system was cut out—light, power and central heating. Two extension telephone wires from house to lodge and two television masts on the chimney were damaged. Thirteen trees were struck, one was disintegrated; the others were scored from top to bottom; some of these scores were four inches wide. The height of the trees was 50 feet; the circumference was between $4\frac{1}{2}$ and 40 inches: they were larches and Scots firs situated in the centre of the wood at the top of the hill. The soil was hard red and stoney with one foot of peat top soil."

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part VI.

By A. G. LONG, M.Sc., F.R.E.S.

- 171. *Aporophyla lutulenta* Borkh. Deep-brown Dart. 357.
- 1876 Eyemouth, three at sugar, *var. luneburgensis* (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1876 Ayton Woods, one at sugar (S. Buglass, *ibid.*, p. 128).
- 1877 Cleekhimin, one (R. Renton, *ibid.*, p. 321).
- 1880 Lauderdale, at sugared juniper bushes on Longcroft braes (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
- 1902 Lauderdale. Not common. The *var. luneburgensis* is even darker than *nigra* (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 Appears rare but taken over a considerable area. The very dark variety *luneburgensis* has occurred thrice at Eyemouth (G. Bolam *H.B.N.C.*, Vol. XXVI, p. 160).
- 1932-3 Cockburnspath at sugar, several, very different from the English form, August 16-28 (D. A. B. Macnicol).
- 1952 Dowlaw, one at sugar, August 30 (E. C. Pelham-Clinton).
- 1953 Gavinton, one at street lamp, September 5.
- 1955 Kyles Hill, thirteen at m.v. light, August 12-19; one reared from a larva obtained on heather on Dirrington in mid-June, the moth emerged on August 19.
- 1956 Kyles Hill, five at m.v. light all through the night, August 24; Old Cambus Quarry, one September 1; Gavinton two in m.v. trap, September 9.
- 1957 Gavinton, August 18.
- 1959 Gavinton, August 30; Birgham House, August 26 and September 2 (Grace A. Elliot).
- 1960 Pettico Wick, August 27 (E. C. Pelham-Clinton).

Summary.—Widespread and not uncommon on high ground where larvæ occur on heather. There are two forms, one with very dark forewings, the other with a slate grey ground colour and dark median band across the forewings. The imagines emerge during the last two weeks of August and continue on the wing until about mid-September.

172. *Aporophyla nigra* Haw. Black Rustic. 358.

- 1902 Lauderdale. Very uncertain in its appearance and very local (A. Kelly in *Lauder and Lauderdale* p. 308).
- 1927 Bolam had no records for Berwickshire (*H.B.N.C.*, Vol. XXVI, p. 160).
- 1953 Gavinton, two at street lamp, September 7 and 8 ; Duns, one, October 15 (G. Grahame).
- 1954 Gavinton, two at light, October 1 and 2.
- 1955 Retreat, twelve at m.v. light opposite Cockburn Law, September 3 ; Elba, one at sugar, September 18 ; Gavinton, one in m.v. trap September 27.
- 1956 Kyles Hill, two at m.v. light, September 8 ; Gavinton, eight at light, September 9-October 30 ; Grantshouse, one at sugar on a telegraph pole along AI road, October 20.
- 1957 Gavinton, one fresh specimen, August 27.
- 1959 Gavinton, August 31 and Sept 12 ; Birgham House, September 10 (Grace A. Elliot).
- 1960 Gavinton, September 3, 6 and 25.
- 1961 Gavinton, September 8 ; Birgham House, September 13 (G. A. Elliot).

Summary.—Widespread but seems to prefer high ground. It starts to emerge about the beginning of September and continues on the wing well into October, earliest date August 27, latest October 30.

173. *Dasypolia templi* Thunb. Brindled Ochre. 360.
- 1875 Ayton, three at light (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
- 1877 Eyemouth, one at light (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 323).
- 1879 Lauder, seven at light by J. Turnbull (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
- 1911-13 St. Abb's Lighthouse, one on April 2, 1911, and one on September 25, 1913 (W. Evans, *Scot. Nat.*, 1914, p. 282).
- 1927 Generally distributed; seldom taken except singly. Recorded for Fans (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 160).
- 1955 Gavinton one in m.v. trap, September 16; Gordon Moss, eight at m.v. light, September 29.
- 1956 Gordon Moss, three April 7, 12 and 21 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Duns, one on Newtown Street, October 7.
- 1959 Duns, one in school bus, September 30 (S. McNeill); Gavinton, two, October 1 and 4; Birgham House, September 29 (Grace A. Elliot).
- 1961 Gavinton, in m.v. trap, two, September 27 and October 3.

Summary.—Widely distributed turning up in small numbers most years. It begins to emerge towards the end of September and comes to light during October. Females hibernate and visit sallows and light in April. The larvæ feed in roots of Hogweed and should be searched for in July.

174. *Antitype chi* Linn. Grey Chi. 362.

- 1877 Threburnford, common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale, very common and variable (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1911 St. Abb's Lighthouse, one *var. olivacea* on July 27 (W. Evans, *Scot. Nat.*, 1914, p. 281).

- 1952 Gordon Moss, August 10 ; Polwarth, August 15 ;
Gavinton, August 15-22 ; Dowlaw, several at sugar,
August 30 (A.G.L. and E. C. Pelham-Clinton).
- 1953 Gavinton, August 11.
- 1954 Spottiswoode—reared from larva, imago emerged
September 2 ; Gavinton, at sugar, September 11.
- 1955 Gavinton, four, August 24-September 11 ; Gordon
Moss, August 26.
- 1956 Old Cambus Quarry, Kyles Hill, Gavinton, Gordon
Moss, September 1-22 (A.G.L. and E. C. Pelham-
Clinton).
- 1957 Hutton Bridge, one at rest on a tree trunk, September 7.
- 1958 Duns, September 6.
- 1959 Gavinton, August 7-20 ; Birgham House, August 11
and 12 (Grace A. Elliot).
- 1960 Gavinton, August 15.
- 1961 Gavinton, August 25 and September 4.

Summary.—A common and widespread species from the coast to the hills. It usually emerges in August and remains on the wing well into September. It can be found by day on walls and tree trunks and at night is attracted to sugar and light.

175. *Griposia aprilina* Linn. Merveille-du-jour. 364.

- 1873 Preston (A. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
- 1874 In the grand old wood (Aiky) at sugar (A. Kelly, *ibid.*,
p. 233).
- 1880 Aiky Wood (plentiful) and Abbey St. Bathans (A.
Kelly, *H.B.N.C.*, Vol. IX, p. 385).
- 1902 Lauderdale, more or less common over the vale (A.
Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 Well distributed and fairly plentiful in suitable places
(G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 162).
- 1952 Gavinton, September 18 and October 16.
- 1953 Gavinton, eleven specimens, September 24-October 22.
- 1954 Gavinton, three, September 26-October 6.

- 1955 Retreat, Elba, Gavinton, Oxendean Pond, Kyles Hill, several at treacle and m.v. light, September 3-October 11.
- 1956 Paxton, one larva found on an oak tree trunk, June 11 ; Gavinton, two, October 7 ; Aiky Wood near Whitegate, two at m.v. light, October 16.
- 1959 Gavinton, several, September 15-October 9.
- 1960 Gavinton, September 27 ; Birgham House, September 16 (Grace A. Elliot).

Summary.—A beautiful moth when seen at the sugar patch. It occurs fairly commonly wherever there are oak woods usually from about mid-September to mid-October and is readily taken at light.

176. *Meganephria oxyacanthae* Linn.

Green Brindled Crescent. 368.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1902 Lauderdale, comes freely to sugar (A. Kelly in *Lauder and Lauderdale*, p. 308).
- 1927 Generally common, the dark variety *capucina* occasional (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 162).
- 1948 Preston, one at lighted window of the Schoolhouse, October 5.
- 1952 Gavinton and Polwarth, at sugar, September 17-24.
- 1953 Gavinton, October 3.
- 1954 Gavinton, Lees Cleugh, Earlston, October 2-12.
- 1955 Nesbit, Gavinton, Gordon Moss, Oxendean Pond (several), Kyles Hill, at sugar and light, September 14-October 7.
- 1956 Gavinton, Burnmouth, September 18-October 7.
- 1959 Gavinton, September 14-October 7 ; Birgham House, September 25 (Grace A. Elliot).
- 1960 Gavinton, very frequent at m.v. trap, September 21-25.
- 1961 Gavinton, September 21-October 4.

Summary.—A common visitor to light and sugar from mid-September to mid-October. I have never seen the dark

variety in the county whereas it was the only form I knew at Todmorden (Yorkshire) where I collected as a boy. I was much struck by the lovely Berwickshire specimens when I first saw them. Larvæ occurred at Gavinton on a *Prunus* in the hedge near the main entrance to the Langton Churchyard.

- 177. *Euplexia lucipara* Linn. Small Angle-shades. 372.
- 1873 Broomhouse (A. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
- 1874 Ale banks, not uncommon at sugar (W. Shaw, *ibid.*, p. 236).
- 1902 Lauderdale. *Pteris aquilina* on the grassy sides of the hills (A. Kelly in *Lauder and Lauderdale*, p. 309).
- 1927 Well distributed. Records for Foulden, Ayton, Eyemouth, Fans (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 168).
- 1951 Cockburnspath a few at sugar, June 16 ; Gordon Moss, many, June 30 (E. C. Pelham-Clinton).
- 1952 Kyles Hill, several larvæ on ferns, September 6.
- 1953 Kyles Hill, larvæ, August 21.
- 1954 Gavinton, Cockburnspath, May 29-July 9 (A.G.L. and E. C. Pelham-Clinton).
- 1955 Retreat and Gordon Moss (common at sugar) May 23-July 4.
- 1956 Hirsell, Retreat, Gavinton, Gordon Moss, Bell Wood, Linkum Bay, Old Cambus Quarry, May 30-July 15.
- 1957 Gavinton, Gordon, June 2-July 30.
- 1958 Langton, July 11.
- 1960 Gavinton, June 4, Birgham House (Grace A. Elliot).
- 1961 Birgham House, June 5 (G. A. Elliot).

Summary.—A common species over most of the county the larvæ feeding on Bracken and other ferns. The imagines start to emerge about the end of May and continue on the wing through June and July. A frequent visitor to sugar and light.

178. *Phlogophora meticulosa* Linn. Angle-Shades. 373.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Broomhouse (A. Anderson, *ibid.*, p. 232).
 1902 Lauderdale, very abundant at sugar (A. Kelly in *Lauder and Lauderdale*, p. 309.).
 1927 Common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 168).
 1946 Preston, in May and June.
 1952 Gavinton at street lamps, June 26 and August 28-October 21; Dowlaw, several at sugar, August 30 (E. C. Pelham-Clinton).
 1953 Gavinton, June 25 and September 28-December 12.
 1954 Cockburnspath, one at sugar, June 26 (E. C. Pelham-Clinton).
 1955 Duns Castle Lake, Gavinton, Kyles Hill, August 22-December 2. On November 12 I counted eleven specimens near street lamps in Duns during daytime.
 1956 Gordon Moss, Gavinton, Grantshouse (ten at sugar), August 10-December 6.
 1957 Duns, August 24.
 1958 Gavinton, Cove, Clockmill, October 12-November 21.
 1959 Gavinton, Burnmouth, Birgham, July 21-October 11 (A.G.L. and G. A. Elliot).
 1960 Gavinton, June 3 and July 23-October 2.
 1961 Gavinton, September 23-November 15.

Summary.—An abundant species the imago occurring in small numbers in May and June and more commonly from late July until early December. It visits sugar and light and in spite of its delicate appearance it flies late in the year when most other species are dormant.

179. *Celaena haworthii* Curt. Haworth's Minor. 374.

- 1872 Recorded by A. Kelly (J. Hardy, *H.B.N.C.*, Vol. VI, p. 397).
 1873 Hog's Law (A. Kelly, *H.B.N.C.*, Vol. VII, p. 122).
 1875 Coldingham Moor, one (S. Buglass, *ibid.*, p. 483).
 1877 Threeburnford, not common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 A flourishing colony in a very bleak bog at the foot of Hog's Law where food plant is abundant (A. Kelly in *Lauder and Lauderdale*, p. 305).
 1927 Well distributed over moors, flies in daytime (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 166).
 1952 Gordon, a few at ragwort, August 10 (E. C. Pelham-Clinton).
 1953 Kyles Hill, on ragwort in daytime, August 21 and 25.
 1954 Kyles Hill, at Tilley lamp, September 5.
 1955 Penmanshiel Moss, on ragwort in daytime, August 3 ; Gordon Moss and Kyles Hill, at m.v. light, August 2-26.
 1956 Gordon Moss and Kyles Hill, August 10-September 22 (A.G.L. and E. C. Pelham-Clinton).

Summary.—A moorland species which flies both during the day and at night. It comes to light and is often found on Ragwort flowers during the day. Larvæ feed on Cotton-grass. The imagines fly from about the first week in August to the last week in September.

*180. *Celaena leucostigma* Hübn. Crescent. 375.

- 1879 Eyemouth, sea banks (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1927 Rare. Buglass got another at Ayton a few years after the one taken at Eyemouth. Shaw also took one at sugar on Eyemouth sea banks (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 169).

Summary.—We have no recent records of this species in the county. The moth flies in August in marshy places where its food plants grow, viz. : *Carex acutiformis*, *Iris pseudacorus* and *Molinia caerulea* (on moors). Bolam took one specimen in Berwick, July, 1882.

181. *Phalaena typica* Linn. Gothic. 376.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Preston, one from larva feeding on primrose (J. Anderson, *ibid.*, p. 231).
 1902 Lauderdale, fairly common at sugar (A. Kelly, *Lauder and Lauderdale*, p. 310).
 1927 Generally common throughout the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 176).
 1952 Gavinton, at sugar, July 14 and 15.
 1954 Gavinton bridge, two at Tilley lamp, August 8.
 1955 Gordon Moss, one at m.v. light, July 4.
 1956 Gordon Moss, one, August 10.

Summary.—This is a species which has become unaccountably scarce of recent years. It flies from mid-July to mid-August and comes both to light and sugar.

182. *Hydraecia oculea* Linn. Common Ear. 377.

- 1873 "*H. nictitans*" recorded on thistle (J. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
 1873 Lauder Common, "*H. nictitans*" recorded as plentiful (A. Kelly, *ibid.*, p. 122).
 1877 Threeburnford, "*H. nictitans*" recorded as common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1880 Gordon Moss, "*H. nictitans*" recorded (R. Renton, *H.B.N.C.*, Vol. IX, p. 295).
 1927 "*H. nictitans*" recorded as abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 169).

The former species *H. nictitans* has now been split and the three species occurring in Berwickshire are *H. oculea*, *H. lucens* and *H. crinanensis*. These can only be separated accurately by examination of the genitalia. The following records for *H. oculea* have all been confirmed in this way.

- 1951 Cockburnspath, one at sugar, August 26 (E. C. Pelham-Clinton).
 1952 Dowlaw, August 30 (E. C. Pelham-Clinton).
 1953 Gavinton, at street lamps, August 11.

- 1955 Gordon Moss, August 2 ; Bell Wood, two at m.v. light, August 4 ; Kyles Hill, August 12 ; Retreat, September 3.
- 1956 Gordon Moss, at light, September 22 and at ragwort about noon September 23 (E. C. Pelham-Clinton) ; Hirsel at light, September 20 (A.G.L.).

Summary.—A common species but not so abundant as *H. lucens*. It is widely distributed on both low and high ground and occurs at the coast. It flies both by day and night and begins to emerge during the first week of August continuing on the wing until the last week in September.

183. *Hydraecia crinanensis* Burr. Crinan Ear. 378.

- 1952 Gordon Moss, one at ragwort, August 10 (E. C. Pelham-Clinton).
- 1953 Kyles Hill, one at ragwort, August 21.
- 1954 Kyles Hill, one at light, September 5 ; Gavinton, one at street lamp, September 7.
- 1955 Kyles Hill, three, August 12 and 19 ; Gordon Moss, two at light, August 26.
- 1956 Kyles Hill, at light, August 24 (A.G.L.) ; Gordon Moss September 22 (E. C. Pelham-Clinton).

Summary.—This is the least common of our three species of Ear moths. It emerges in the first half of August and continues flying until late September. It visits Ragwort during daytime and comes to light at night. The ground colour varies from grey to brownish pink and the " ear-mark " may be white, yellow or orange. It is usually slightly longer in the wings than *H. oculea*. All the above records were confirmed by examination of genitalia.

184. *Hydraecia lucens* Frey. Large Ear. 379.

- 1955 Kyles Hill, twenty, August 12-19 ; Gavinton, six, August 20-26 ; Duns Castle Lake, one, August 22 ; Bell Wood, one, August 4 ; Gordon Moss, one, August 9.

- 1956 Kyles Hill, three, August 24-September 8 ; Gavinton, one, September 9 (A.G.L.) ; Gordon Moss, three at light, September 22 (E. C. Pelham-Clinton).

Summary.—This is our commonest species of Ear moth and very variable in size and colour. It is usually (but not always) larger than *oculea* but I know of no way of separating it from *crinanensis* except by the genitalia. It flies from the first week of August until late September.

185. *Hydraecia micacea* Esp. Rosy Rustic. 381.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1902 Lauderdale, very common (A. Kelly, *Lauder and Lauderdale*, p. 304).
 1913 St. Abb's Lighthouse, September 25 (W. Evans, *Scot. Nat.*, 1913, p. 231).
 1927 Well distributed and fairly common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 169).
 1952 Dowlaw, at sugar and ragwort, several, August 30 (E. C. Pelham-Clinton) ; Gavinton, abundant, August 12-September 23.
 1953 Gavinton, September 5-October 7.
 1954 Gavinton, August 24-October 4.
 1955 Gavinton, Coldingham, Kyles Hill, Gordon Moss, Oxendean Pond, Elba, July 23-October 11 (A.G.L. and E. C. Pelham-Clinton).
 1956 Gavinton, August 9-October 7.
 1957 Gavinton, August 4-October 16.
 1959 Gavinton, July 20, an early date (hot summer), last date, October 10.
 1960 Gavinton, July 25.
 1961 Gavinton, August 12 ; Birgham House, August 14 (Grace A. Elliot).

Summary.—A very common autumnal species emerging about the beginning of August and continuing on the wing into October ; earliest date July 20, latest date October 16.

186. *Hydraecia petasitis* Doubl. Butterbur. 382.
- 1927 Bolam's only record was at Berwick for 1901 (*H.B.N.C.*, Vol. XXVI, p. 169).
- 1948 Coldingham, September 3 (W. B. R. Laidlaw, *H.B.N.C.*, Vol. XXXI, p. 247).
- 1954 Gavinton (Langton Burn), about two dozen larvæ in early July from which several moths were reared.
- 1955 Gordon Moss, at m.v. light, August 2 and 9 ; Gavinton, at m.v. light, August 20 (A.G.L.) ; Coldingham, three at light, August 27 (E. C. Pelham-Clinton).
- 1959 Gavinton, one in m.v. trap, August 12 ; Birgham House in m.v. trap, August 20 and September 12 (Grace A. Elliot).
- 1960 Birgham House, August 20 and 26 (Grace A. Elliot) ; Gavinton, August 28.
- 1961 Gavinton, two in m.v. trap, September 12, October 4. One at Birgham House in early October (G. A. Elliot).

Summary.—This species probably occurs throughout the County wherever its food plant—Butterbur grows. The imagines start to emerge about the beginning of August and continue until the end of September. Larvæ can be dug up in the rootstock of the foodplant during early July.

187. *Gortyna flavago* Schiff. Frosted Orange. 383.

- 1876 Eyemouth, one at sugar (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1877 Threeburnford, three (R. Renton, *ibid.*, p. 320).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 295)
- 1902 Lauderdale, local, larvæ in ragwort stems (A. Kelly, *Lauder and Lauderdale*, p. 304).
- 1927 Coldingham Moor, larvæ (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 170).
- 1953 Gavinton street lamps, September 5 and 28.
- 1954 Gordon Moss, one pupa inside ragwort stem, imago emerged September 4 ; Gavinton, two, September 13

and October 4. Seven pupæ were found on September 27 inside stems of Marsh Thistle but all had been stung.

- 1955 Gavinton, nine sound pupæ found on August 18 inside stems of ragwort, first imago emerged, August 26 ; Retreat, two at m.v. light, September 3 ; Gavinton, six, September 9-21 ; Elba, one September 18 (A.G.L.) ; Coldingham, one August 27 (E. C. Pelham-Clinton).
- 1956 Hirsell, Burnmouth, Gavinton, Gordon Moss, several, September 7-October 7 (A.G.L. and E. C. Pelham-Clinton).
- 1959 Gavinton, August 22 and 30 ; Birgham House, August 20 (Grace A. Elliot).
- 1960 Paxton, September 23 (S. McNeill).
- 1961 Gavinton, September 23.

Summary.—Common and widely distributed. Larvæ feed inside stems of ragwort and thistles and pupæ can also be found similarly during the second half of August. The imagines start to emerge about the end of August and continue into early October.

188. *Nonagria typhae* Thunb. Bulrush. 386.

- 1927 Paxton, Nabdean Pond (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 171).
- 1953 Gavinton, one at street lamp, August 31.
- 1954 Duns Castle Lake, thirteen pupæ inside stems of *Typha*, August 10.
- 1955 Duns Castle Lake, several at m.v. light, August 22 ; Gavinton, one, August 25 ; Oxendean Pond, one, August 27.
- 1956 Gavinton, one at street lamp, September 10.
- 1959 Birgham House, August 12 (Grace A. Elliot) ; Nab Dean, one from pupa (S. McNeill).
- 1960 Birgham House, August 22 and 26 (G. A. Elliot) ; Gavinton, August 26 (A.G.L.) ; Pettico Wick, one at light, August 27 (E. C. Pelham-Clinton).
- 1961 Birgham House, September 23 (G. A. Elliot).

Summary.—Widely distributed but local. The larvæ feed and pupate inside the stems of the Reed Mace and can be found in early August. The imagines start to emerge about mid-August and continue on the wing until about mid-September.

189. *Arenostola pygmina* Haw. Small Wainscot. 393.
- 1875 Banks of Ale, common among rushes (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482).
- 1897 Swarms near Lauder (W. Shaw, *H.B.N.C.*, Vol. XVI, p. 231).
- 1902 Lauder, flies at dusk (A. Kelly, *Lauder and Lauderdale*, p. 304).
- 1927 Well distributed from sea-banks to hills (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 171).
- 1952 Coldingham Moor, August 21; Kyles Hill, flying at dusk, August 28 (A.G.L.); Gordon Moss, a few on wing in afternoon, September 28 (E. C. Pelham-Clinton).
- 1953 Coldingham Moor, August 27.
- 1954 Kyles Hill at Tilley lamp, September 5 (A.G.L.); Gordon Moss, several on wing at 6 p.m. B.S.T., September 25 (E. C. Pelham-Clinton).
- 1955 Kyles Hill, Duns Castle Lake, Gavinton, Gordon Moss (abundant), Oxendean Pond, Retreat, Elba, Burnmouth (July 26-September 18).
- 1956 Hirsel Loch, Burnmouth, Gordon, August 6-September 22 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, August 27.
- 1959 Gavinton, August 25; Kyles Hill, August 27 (A.G.L.); Birgham House, August 20 (Grace A. Elliot).
- 1960 Near mouth of Langton Burn flying in afternoon, September 21.
- 1961 Gavinton, at m.v. trap, September 8; Birgham House, September 23 (G. A. Elliot).

Summary.—Common and widely distributed on both high and low ground. The imagines may begin to emerge in late July and continue through August and September. They fly in the afternoon and at night and come readily to light.

190. *Rhizedra lutosa* Hübner. Large Wainscot. 400.

- 1875 Preston, one sitting on a tree trunk (J. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
 1952 Duns, one taken by G. Grahame, October 27.
 1953 Gavinton, two at street lamps, September 16 and 25.
 1956 Burnmouth, one at m.v. light, September, 21.
 1959 Birgham House, five, September 25, October 3 and 7 (Grace A. Elliot); Gavinton, one October 7; Duns, one October 11 (S. McNeill).

Summary.—The larva of this species feeds in the rhizomes of the Common Reed (*Phragmites communis*). Robson states that they often occur below water level but they leave the plant to pupate. The species is fairly common at Aberlady Bay in E. Lothian (D. A. B. Macnicol) and must be established in Berwickshire, *e.g.*, along the Tweed, though I have never succeeded in tracking down its breeding haunts. The moths emerge from mid-September to the end of October and come readily to light.

191. *Leucania pallens* Linn. Common Wainscot. 403.

- 1902 Lauderdale, watersides, rushes, abundant (A. Kelly, *Lauder and Lauderdale*, p. 304).
 1927 Well distributed and common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 172).
 1952 Gavinton, common, July 12-August 20. Gordon Moss, one at sugar, August 10 (E. C. Pelham-Clinton).
 1953 Gavinton, July 6-August 19.
 1954 Gavinton and Duns Castle Lake, July 26-September 11.
 1955 Gavinton, Gordon Moss, Bell Wood, July 8-August 20 (A.G.L. and E. C. Pelham-Clinton)
 1956 Hirsel, Linkum Bay, Gavinton, Bell Wood, Gordon Moss, Burnmouth, Cove, Old Cambus, June 29-August 23.
 1957 Gavinton, July 2-August 5.
 1959 Birgham House, September 9 (Grace A. Elliot).
 1961 Gavinton, July 15-30.

Summary.—A very common species and widespread. It first emerges about the first week in July and may continue on the wing into early September.

192. *Leucania impura* Hühn. Smoky Wainscot. 405.

- 1902 Lauderdale, low flowers, wild thyme and rushes (A. Kelly in *Lauder and Lauderdale*, p. 304).
 1927 Well distributed and common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 172).
 1952 Gavinton, July 1-15.
 1953 Gavinton, July 6-August 31.
 1954 Gavinton, July 18-August 8.
 1955 Gavinton and Gordon, July 18-August 11 (A.G.L. and E. C. Pelham-Clinton).
 1956 Bell Wood, Pettico Wick, Gavinton, Gordon Moss, Linkum Bay, Hirsell, Burnmouth, Aiky Wood, Old Cambus, June 23-August 26 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gordon Moss, many at light, July 20 (E. C. Pelham-Clinton).
 1960 Gavinton, July 8-September 10.
 1961 Gavinton, July 15-September 8; Birgham House, July 19 (Grace A. Elliot).

Summary.—Common and widespread. It first emerges about the last week in June and continues sometimes into early September. It visits both sugar and light.

193. *Leucania comma* Linn.

Shoulder-striped Wainscot. 410.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1876 Ayton woods, common (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 127).
 1902 Lauderdale. Captured at dusk at flowers and rushes (A. Kelly, *Lauder and Lauderdale*, p. 304).
 1927 Widely distributed, commonest on coast (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 172).
 1951 Cockburnspath, one at sugar, June 16; Gordon Moss, a few at sugar, June 30 (E. C. Pelham-Clinton).
 1953 Gavinton, at light, July 3.

- 1954 Cockburnspath, several at sugar, June 26 (E. C. Pelham-Clinton) ; Gavinton, July 9.
 1955 Gordon Moss, at light, July 4.
 1956 Hirsel, June 15 and 29 ; Broomhouse, June 20 ; Linkum Bay, June 30 ; Nab Dean Pond, July 7 ; Old Cambus Quarry, July 15.
 1957 Gavinton, July 2.
 1960 Gavinton, June 3 and 28. Birgham House (Grace A. Elliot).
 1961 Gavinton, July 22 ; Birgham House, July 19 (G. A. Elliot).

Summary.—Fairly common and widespread. The imagines first start to emerge about mid-June and continue on the wing until late July coming to sugar and light.

194. *Leucania lithargyria* Esp. Clay. 417.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1902 Lauderdale, wild thyme, watersides (A. Kelly, *Lauder and Lauderdale*, p. 304).
 1927 Common all over the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 172).
 1952 Gavinton, June 27-July 11 ; larvæ common in May.
 1955 Gavinton, at m.v. trap, July 4-23 ; Bell Wood, August 4.
 1956 Bell Wood (very common), Hirsel, Linkum Bay, Nab Dean Pond, Gavinton, Old Cambus Dean, Burnmouth, June 23-August 6.
 1959 Birgham House, July 22 (Grace A. Elliot).
 1961 Gavinton, July 24 and August 7.

Summary.—A common species on both high and low ground. It flies from about the last week of June to the first week of August. The larvæ can be found feeding on grasses at night in May around the borders of woods.

195. *Leucania conigera* Fabr.

Brown-line Bright-Eye. 418.

- 1877 Threeburnford, common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 320).
 1902 Lauderdale, very common (A. Kelly, *Lauder and Lauderdale*, p. 304).
 1927 Well distributed and generally common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 172).
 1952 Gavinton, July 15 and 26.
 1953 Gavinton, July 10.
 1954 Gavinton, July 16.
 1955 Gavinton, July 4; Gordon Moss, several at light, July 18 and 20; Bell Wood, August 4 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gordon Moss, several, July 20 (E. C. Pelham-Clinton).
 1959 Gavinton, July 26.
 1960 Gavinton, July 27-31.
 1961 Gavinton, July 23 and 24; Birgham House, July 19 (Grace A. Elliot).

Summary.—A fairly common species. It visits the flowers of Rose-bay Willow-herb and is attracted to light. The moths emerge in the latter half of July and continue on the wing into August.

196. *Stilbia anomala* Haw. Anomalous. 420.

- 1874 Drakemire, two (A. Anderson, *H.B.N.C.*, Vol. VII, p. 232).
 1876 Eyemouth, three at sugar (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
 1876 Ayton Woods, four at sugar (S. Buglass, *ibid.*, p. 128).
 1902 Lauderdale. A rare insect as yet (A. Kelly, *Lauder and Lauderdale*, p. 310).
 1927 Usually reckoned rare but widely distributed (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 177).
 1953 Cockburn Law, one flying in daytime near Aller Burn August 1.

- 1955 Bell Wood, several at m.v. light, July 29 and August 4 ; Retreat, July 31 ; Kyles Hill, August 12.
- 1956 Aiky Wood near Whitegate, at m.v. light very late (after 2 a.m.) August 9 ; Burnmouth, four at m.v. light, August 26.
- 1961 Gavinton, one in m.v. trap, August 17.

Summary.—Not uncommon, occurring on high ground and at the coast. It starts emerging about the last week in July and flies until about the last week in August. Sometimes it flies by day but is most readily taken at night either at sugar or m.v. light.

197. *Caradrina morpheus* Hufn. Mottled Rustic. 422.

- 1902 Lauderdale. Not rare (A. Kelly, *Lauder and Lauderdale*, p. 305).
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1876 Ayton, four (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128)
- 1927 Somewhat local and not generally numerous (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 177).
- 1953 Gavinton, July 25.
- 1954 Gavinton, July 17 and August 8.
- 1955 Gavinton, June 15-July 7.
- 1956 Gavinton, Gordon Moss, Hirsell, Linkum Bay, nineteen at light, June 11-July 24.
- 1957 Gavinton, June 16-July 23.
- 1959 Gavinton, July 10.
- 1960 Gavinton, June 2- July 18.
- 1961 Gavinton, July 19-August 7 ; Birgham House, July 19 (Grace A. Elliot).

Summary.—Fairly common but possibly somewhat local. The imagines start emerging about mid-June or earlier and continue on the wing throughout July and into early August. They come freely to light.

[*Caradrina alsines* Brahm. Uncertain. 424.

- 1875 Eyemouth sea-banks; a fair series but much worn (W. Shaw, *H.B.N.C.*, Vol. VII, p. 482).
- 1875 Ayton, at wood sage, sea banks (S. Buglass, *ibid.*, p. 483).
- 1902 Lauderdale, by J. Turnbull (A. Kelly, *Lauder and Lauderdale*, p. 305).
- 1927 Bolam wrote, "personally I have never seen *alsines* in this district either at large or in collections" (*H.B.N.C.*, Vol. XXVI, p. 178).

Summary.—This species is very similar to *C. taraxaci* and it is possible that the above records refer to *taraxaci*.

Robson met with the same problem and concluded that *alsines* had not been taken in Northumberland].

198. *Caradrina taraxaci* Hübn. Smooth Rustic. 425.

- 1876 Burnmouth, woodsage on sea-banks (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
- 1877 Cleekhimin, one (R. Renton, *ibid.*, p. 321).
- 1902 Lauderdale, common (A. Kelly, *Lauder and Lauderdale*, p. 305).
- 1927 Fairly common in all parts of the district that have been carefully worked (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 178).
- 1955 Gordon Moss, two July 21; Gavinton, several, July 23-August 11; Bell Wood, several, July 29 and August 4; Retreat, July 31.
- 1956 Gavinton, Old Cambus Quarry, Pettico Wick, Hirsell, Burnmouth, Aiky Wood, several at m.v. light, July 14-August 26 (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gordon Moss, July 20 (E. C. Pelham-Clinton); Gavinton July, 22.
- 1959 Gavinton, August 13.
- 1960 Gavinton, July 9 and 23.
- 1961 Gavinton, August 2 and 19.

Summary.—Fairly common and widespread. The imagines start to emerge about mid-July and continue on the wing until late August.

199. *Caradrina clavipalpis* Scop. Pale Mottled Willow. 427.
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Addinston Stables, very common (A. Kelly, *Lauder and Lauderdale*, p. 305).
- 1911 St. Abb's Lighthouse, one, October 29 (W. Evans, *Scot. Nat.*, 1914, p. 253).
- 1927 Everywhere abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 178).
- 1951 Cockburnspath, at ragwort, August 26 (E. C. Pelham-Clinton).
- 1952 Gavinton, June 25-August 8; Dowlaw, August 30 (E. C. Pelham-Clinton).
- 1953 Gavinton, June 12-August 16.
- 1954 Gavinton, July 31-September 15.
- 1955 Gavinton, July 9-November 11 (on October 9, one at Gavinton with orange mites on its wings).
- 1956 Gavinton, May 26-September 8; Gordon Moss, one, at dusk, June 21 (E. C. Pelham-Clinton).
- 1957 Gavinton, May 29-June 18 and October 9.
- 1959 Gavinton, July 10, also September 16-October 10.
- 1960 Gavinton, August 10-September 10.
- 1961 Gavinton, September 23-October 3; Birgham House, one with orange mites on wings (Grace A. Elliot).

Summary.—Common and widespread. The species seems to be in part double brooded the moths appearing in late May and June and also from July to October. This could be a single continuous summer emergence.

200. *Laphygma exigua* Hübn. Small Mottled Willow. 428.
- 1959 Birgham House, one in m.v. trap, October 3 (Grace A. Elliot).

Summary.—This species has almost a world-wide distribution but is only a very rare migrant to Scotland.

201. *Petilampa arcuosa* Haw. Small Dotted Buff. 429.
- 1902 Lauderdale, common, feeds on *Aira caespitosa* (A. Kelly in *Lauder and Lauderdale*, p. 304).
- 1911 St. Abb's Lighthouse, July 12 (W. Evans, *Scot. Nat.*, 1914, p. 233).
- 1927 Generally common throughout the district and often abundant. Records for Ayton, Coldingham and Whitadder banks (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 177).
- 1952 Gavinton, at street lamp, July 1; Lees Cleugh, flying at dusk, July 5.
- 1953 Gavinton lamps, July 12-31.
- 1954 Gavinton, Gordon Moss, Kyles Hill, July 9-August 24 (A.G.L. and E. C. Pelham-Clinton).
- 1955 Gavinton, July 10-August 12.
- 1956 Hirsell, Linkum Bay, Bell Wood, Gordon Moss, Burnmouth, June 29-August 10.
- 1957 Gavinton, July 8; Gordon, July 20 (E. C. Pelham-Clinton).
- 1960 Gavinton, June 22.
- 1961 Gavinton, August 7.

Summary.—A common species in damp rushy places flying from the last week in June to the last week in August.

202. *Rusina umbratica* Goeze. Brown Rustic. 432.

- 1874 Preston, one (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231).
- 1874 Eyemouth, at sugar, common (W. Shaw, *ibid.*, p. 235).
- 1877 Threeburnford, common at sugar (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).
- 1902 Lauderdale, males very common, females extremely difficult to get, comes freely to sugar (A. Kelly, *Lauder and Lauderdale*, p. 305).
- 1911 St. Abb's Lighthouse, July 27 also July 1, 1914 (W. Evans, *Scot. Nat.* 1914, p. 253).
- 1927 Common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 175).
- 1951 Cockburnspath, June 16, Gordon Moss, June 30 (E. C. Pelham-Clinton).
- 1952 Gavinton, May 24-June 27.

- 1953 Gavinton, June 12.
- 1954 Gavinton, Gordon, Cockburnspath, June 7-July 10
(A.G.L. and E. C. Pelham-Clinton).
- 1955 Bell Wood, Gordon Moss, Oxendean Pond, Kyles Hill,
Penmanshiel Moss, May 28-June 18.
- 1956 Hirsell, Retreat, Gordon, Broomhouse, Kyles Hill, Bell
Wood, Linkum Bay, May 30-July 9.
- 1957 Gavinton, June 17-July 13.
- 1959 Gavinton, July 17.
- 1961 Birgham House, June 1-3 (Grace A. Elliot).

Summary.—An abundant widespread species visiting sugar and light. It begins to emerge about the last week in May and continues on the wing until about mid-July. Some dark iron-grey forms occur.

203. *Amphipyra tragopoginis* Linn. Mouse. 434.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1902 Lauderdale, common (A. Kelly, *Lauder and Lauderdale*,
p. 310).
- 1913 St. Abb's Lighthouse, August 29 and September 1
(W. Evans, *Scot. Nat.*, 1914, p. 279).
- 1927 Common throughout the county (G. Bolam, *H.B.N.C.*,
Vol. XXVI, p. 176).
- 1952 Gavinton, Gordon, Dowlaw, August 2-September 27
(A.G.L. and E. C. Pelham-Clinton).
- 1953 Gavinton, August 11-October 7.
- 1954 Gavinton, August 26-October 7.
- 1955 Gavinton, August 22-October 10.
- 1956 Gavinton, Hirsell, Nesbit, Burnmouth, Old Cambus
Quarry, Gordon Moss, August 12 - September 22
(A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, August 5.
- 1958 Duns, September 13.
- 1959 Gavinton, August 5.
- 1961 Gavinton, September 23 ; Birgham House, August 14-
29 (Grace A. Elliot).

Summary.—Very common and widespread. It emerges from the first week in August and flies into the first half of October.

204. *Cosmia trapezina* Linn. Dun-Bar. 439.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Aiky Wood near Hoardweel, plentiful (A. Kelly), *ibid.*, p. 233).
 1876 Eyemouth, one at sugar, sea-banks (W. Shaw, *H.B.N.C.* Vol. VIII, p. 124).
 1902 Lauderdale, common on oaks (A. Kelly, *Lauder and Lauderdale*, p. 308).
 1927 Generally distributed and common in suitable places (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 180).
 1952 Gordon Moss, a few at sugar August 10 (E. C. Pelham-Clinton); Langton Estate, August 22; Duns, September 15.
 1953 Gavinton, August 23.
 1955 Retreat, July 31 and September 3; Gavinton, August 12-26; Kyles Hill, August 19; Duns Castle Lake, August 22; Oxendean Pond, several, August 27.
 1956 Gordon Moss, August 10; Kyles Hill, one reared from larva, August 29; Hirsell Loch, at m.v. light, September 7.
 1961 Gavinton, September 4; Birgham, one reared from larva on oak (Grace A. Elliot).

Summary.—A fairly common species where there are oak woods. The imagines begin to emerge about mid-August and continue on the wing until about mid-September. The larva is a notorious cannibal.

*205. *Enargia paleacea* Esp. Angle-striped Sallow. 440.

- 1880 Burnmouth, taken by S. Buglass (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 179).

Summary.—This species is associated with birch woods in the Highlands and if it was indigenous in the county one would have expected it to have turned up at m.v. light in birch woods. The moth flies in August-September and will visit sugar and the flowers of heather.

206. *Zenobia subtusa* Fabr. Olive Kidney. 443.

- 1872 Preston, one in August (J. Anderson, *H.B.N.C.*, Vol. VI, p. 398).
1875 Eyemouth, one at sugar at Highlaws (W. Shaw, *H.B.N.C.*, Vol. VII, p. 483).
1902 Lauderdale, at different stations, never common (A. Kelly in *Lauder and Lauderdale*, p. 308).
1956 Hirsell Loch, one at m.v. light, September 7.
1960 Birgham House, one at m.v. light, August 19 (Grace A. Elliot).

Summary.—Not common but apparently widespread depending on the presence of poplars. The moth flies from mid-August to mid-September. The larvæ feed in May spun up between leaves.

BOTANY

Observations by A. G. LONG.

Centaurea scabiosa. Greater Knapweed, a single plant, was found growing on the left bank of the Whitadder above Blanerne Bridge on July 23.

Galium mollugo. Hedge Bedstraw, one plant found on left bank of Whitadder south of Blanerne House, July 25.

Allium vineale. Crow Garlic, several plants seen on right bank of Whitadder between Paxton and Canty's Bridge, July 26 (on English side of the Boundary).

Apium nodiflorum. Procumbent Apium, and

Pedicularis palustris. Red Rattle, found at Fangrist Burn, between Hule Moss and Dogden Moss, Aug. 15.

Melilotus officinalis. Common Melilot, found on shingle at Paradise, near Cumledge, Sept. 2.

ENTOMOLOGY

Observations during 1962 by GRACE A. ELLIOT.

Cucullia chamomillae. Chamomile Shark, three larvae found in a field of Scentless Mayweed growing at Dinnington, near Newcastle, in early August.

Cynia mendica. Muslin Ermine came to m.v. light again at Birgham House on June 12.

Ourapteryx sambucaria. Swallow Tailed Moth likewise turned up again on July 19 and 28.

Abrostola tripasia. Dark Spectacle, was taken similarly on July 21.

ORNITHOLOGY

Observations during 1962 by F. BRADY, M.Sc., A. G. LONG, D. G. LONG, Lieut.-Colonel W. M. LOGAN HOME, and Colonel CHARLES BRACKENBURY.

Blackcap. A male bird spent a lot of time in a garden at Cornhill Road, Tweedmouth, from mid-January to early March during some very hard weather (F.B.).

Collared Dove. A single bird frequented a corn-stack close to Edrom Village from April 24 to May 1. It then left and came to the East lawn of Edrom House, finally it flew off westwards and was not seen again (W.M.L.H.).

Lesser Redpoll. A pair attempted to build a nest in a *Berberis* bush four feet high, within seven yards of the north window of Edrom House Music-room. Unfortunately a storm on May 30 blew the nest away and the birds disappeared (W.M.L.H.).

Corncrake. Between May 14 and 22 a single bird was seen and heard consistently within the Tweedhill policies. It started calling at the back of Scotch New Water netting seal, and worked its way across the park on to the daffodil lawn in front of the house where it stayed for two or three days. (C.B.).

Osprey. "When sitting at lunch on Monday, July 11, I saw through the window an osprey cruising up and down the River Tweed, roughly between the Union Bridge and the beginning of the Paxton House policies. Although on occasions concealed by trees, it patrolled this area for about ten minutes. Suddenly it turned west and flew straight over the top of this house (Tweedhill), where I was then standing in the garden. It could not have been more than fifty feet above my head and I clearly saw its eye and its talons." (C.B.).

Leach's Fork-tailed Petrel. One found dead on May 21 on Sinclair's Hill Road near Duns by a Berwickshire High School pupil, F. Gallacher (A.G.L.).

Whooper Swan. Two on Tweed at Lennel, Jan. 20 (A.G.L.) ; five at Hule Moss, Feb. 23 (D.G.L.).

Siskin. About fifteen seen in Alders at Duns Castle Lake, Jan. 20 (D.G.L.).

- Buzzard*. Single birds seen at Hule Moss, Jan. 27 and Nov. 4 (D.G.L.); one over Harden's Hill, Aug. 1 (A.G.L.).
- Jay*. Two in Duns Castle Woods, Jan. 20; three at Manderston, Jan. 28; one in Langton, Nov. 4 (D.G.L.).
- Red Breasted Merganser*. One seen off Siccar Point on April 8 (D.G.L.).
- Red Necked Grebe*. One at Pease Bay, April 21 (D.G.L.).
- Black Necked Grebe*. One at Hule Moss, July 3 (D.G.L.).
- Little Grebe*. One at Watch Reservoir, Aug. 8 (D.G.L.).
- Spotted Redshank*. One at Hule Moss, Aug. 4 and 5 (D.G.L.).
- Greenshank*. Two at Watch Reservoir, Aug. 8 and 31 (D.G.L.); one on Whitadder below Blue Scaur near Marden, Aug. 11 (A.G.L.).
- Green Sandpiper*. One on Whitadder above Blannerne Bridge, July 12 (A.G.L.). One at Gavinton, Aug. 7; several on Bell's Burn, Manderston, from Sept. 30 to end of December (D.G.L.).
- Purple Sandpiper*. Several at Pease Bay, April 21 and 29 (D.G.L.).
- Whimbrel*. Two at Hule Moss, Sept. 1 (D.G.L.).
- Scaup*. A few at Hule Moss, Aug. 17 to Nov. 4 (D.G.L.).
- Stonechat*. Two at Pease Bay, April 21 (D.G.L.); one singing at Cove village, April 28 (A.G.L.).
- Snow Bunting*. Eight at Scotston, near Duns, on Nov. 20, about thirty at Hen Toe Bridge, Dec. 2 and 9 (D.G.L., A.G.L.).
- Short-eared Owl*. One on moor near Westruther road west of Kettleshiel, Oct. 11 (A.G.L.).
- Barn Owl*. One hunting in afternoon daylight near Gavinton, Dec. 21 and 28 (D.G.L.).
- Crossbill*. A few seen at Manderston and Kyles Hill, Oct. 14 to Dec. 16 (D.G.L.).
- Magpie*. One seen near Cockburnspath on Aug. 18 and Oct. 7 (D.G.L.).
- Herring Gull*. One was caught by Burnmouth fishermen at sea about 10 miles off Berwick-on-Tweed, Dec. 12. It bore a ring numbered MOSKWA D 488663. The B.T.O. Bird-Ringing Secretary at the British Museum ascertained that the bird had been ringed as a chick on July 9, 1960, on Great Ainov Island in the Murmansk region of Russia (A.G.L.).

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1962.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.		Days with Temperature at or below 32°.	Bright Sunshine.					
	Maximum.	Minimum.		Hrs.	Days with Sun.	Hrs.	Days with Sun.	Hrs.	Days with Sun.
			Cowdenknowes.						Swinton House.
			Swinton House.						
			Manderston.						
			Duns Castle.						
			Lauder.						
			Marchmont.						
			Whitchester.						
January	48	48	9	20	14	21	20	65.0	21
February	51	54	18	17	16	19	23	76.0	22
March	47	48	23	24	18	22	24	78.0	22
April	65	65	8	24	18	22	24	101.0	24
May	65	65	24	11	8	10	26	138.0	26
June	64	65	24	2	0	3	30	128.0	28
July	75	76	30	...	0	1	29	167.0	29
August	69	68	38	...	0	0	28	94.0	28
September	67	66	38	...	0	0	28	154.0	28
October	65	65	33	...	0	0	24	70.0	21
November	62	65	35	2	2	3	19	107.0	24
December	52	51	23	11	10	12	20	58.0	16
	51	52	10	24	23	22	20	60.0	18
Year	75	76	8	111	91	106	295	1231.0	285

RAINFALL IN BERWICKSHIRE DURING 1962.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level -	St. Abb's Head.	Tweed Hill.	Whitchester.	Duns Castle.	Manderston.	Kimmerghame	Swinton House	Lochton.	Marchmont.	Cowdenknowes.	Lauder.	Dura- tion.*	Swinton House.	Hours
		245'	50'	838'	500'	353'	300'	200'	150'	498'	300'	600'			
<i>Month</i>															
January	-	1.89	1.89	3.52	2.80	2.18	2.10	2.07	2.02	2.84	4.43	4.41	44.8		
February	-	.41	.88	1.83	.61	1.07	1.12	.67	.51	1.02	1.76	2.02	17.2		
March	-	1.00	1.95	1.79	1.35	1.68	1.47	1.46	1.23	1.23	1.41	1.43	37.3		
April	-	1.70	1.82	2.62	2.15	2.19	2.11	1.95	1.92	2.40	3.93	2.85	48.3		
May	-	1.47	1.84	1.94	1.73	1.88	1.79	1.47	1.48	1.80	1.58	1.36	35.9		
June	-	.75	.86	.99	.82	.85	.75	.72	.60	.86	1.02	1.14	21.2		
July	-	2.50	3.78	3.75	3.91	3.63	3.00	3.83	3.09	3.98	3.91	3.66	41.6		
August	-	2.95	3.30	4.04	3.28	3.35	3.50	2.96	3.20	3.74	3.21	4.45	51.8		
September	-	3.86	4.60	4.41	4.51	6.20	5.08	4.42	4.00	3.67	3.96	4.39	62.9		
October	-	.75	.60	1.38	1.14	.92	.94	.62	.71	.90	.81	1.49	16.2		
November	-	2.67	3.79	5.16	3.58	4.28	3.88	4.22	3.89	3.88	3.49	3.66	81.0		
December	-	2.82	3.78	3.64	2.14	4.11	3.00	3.16	3.18	3.70	3.30	2.61	72.1		
Year	-	22.77	29.09	35.07	28.02	32.34	28.14	27.55	25.83	30.02	32.61	33.47	530.3		

* Number of hours for which rain fell at a rate of .004 inches or more.

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1962.

INCOME				EXPENDITURE			
Credit Balance at September 20th 1961				History for 1960 (Martins)	...	...	£375 0 0
Subscriptions—				Printing and Stationery—			
Annual	...	...	£388 10 0	Printing Notices (Martins)	...	£56 8 9	
Junior	...	...	2 0 0	Stationery (Martins)	...	4 8 2	
Entrance Fees	...	...	6 0 0	Binding Notices (Martins)	...	5 19 6	
Arrears	...	...	36 5 0	Sundry Expenses—			66 16 5
				Presentation to Mrs. H. G. Miller	...	6 0 0	
			432 15 0	Antiquity Magazine	...	1 10 0	
				Insurance Premium	...	2 2 0	
				Rent of Books in Library	...	1 0 0	
				Wreath for Dr Hunter Blair	...	2 2 6	
				Bank Charges	...	7 0	
				Subscriptions—			13 1 6
				Assoc. Preservation Rural Scotland	...	1 1 0	
				Chillingham Wild Cattle	...	1 1 0	
				British Association	...	3 3 0	
				S.R.G. British Archaeology	...	3 0 0	8 5 0
				Expenses—			
				Secretary	...	29 19 0	
				Ed. Secretary	...	2 0 0	
				Treasurer	...	11 1 9	
				Delegate to British Association	...	10 0 0	53 0 9
				Credit Balance at Bank, September 20th 1962	...		26 5 11
							£542 9 7

BALANCE SHEET.

LIABILITIES		ASSETS	
Carried from General Account	... ..	Cash in Bank	£26 5 11
Investment Account	... ..	National Commercial Bank	... ..
Balance at 20/9/61	... ..	Trustee Savings Bank	... ..
Interest added	... ..		...
			200 17 5
			<u>£227 3 4</u>

FLODDEN FIELD MEMORIAL FUND.

Balance at 20/9/61	...	...	£49	8	7	
Interest added	...	...	1	10	2	
						50 18 9
						<hr/> £50 18 9
						Cash in Bank ...
					
						£50 18 9

Berwick-on-Tweed, 8th October, 1963. Audited and found correct.

(Signed) P. G. GEGGIE, Hon. Auditor.

LIBRARY ACCOUNT FOR 1962/63

	<i>RECEIPTS</i>				<i>PAYMENTS</i>						
	£1 0 9	Postage Balance 6/9/63	...	...	...	...	...	£2 16 10
Balance 31/3/62	5	...	...	...	...	...	38 3 4
Bank Interest	37 2 2	...	...	...	...	...	...
Sale of Histories	2 16 10	...	...	...	...	...	...
Postage recovered
					<hr/>						
				£41 0 2							£41 0 2

C. J. DIXON-JOHNSON.

LIST OF NEW MEMBERS JOINING B.N. CLUB

between September 1958 and August 1962.

Ayre, Mrs. V. M., Marshall Meadows, Berwick-on-Tweed . . .	June 1959
Alexander, Miss K. J., 32 Castle Drive, Berwick-on-Tweed . .	Jan., 1960
Anderson, T. Macmillan, M.D., F.R.C.P.E., 17 Dundas Street, Edinburgh . . .	June 1960
Adamson, Professor R. S., M.A., D.Sc., F.L.S., F.R.S.S.A., F.R.H.S., The Brae, Jedburgh . . .	June 1961
Baker, Mrs. Jean K., 10 Temperance Terr., Berwick-on-Tweed	June 1959
Butters, J. A., 29 Castle Terrace, Berwick-on-Tweed . . .	June 1959
Broadbent, H., Esq., Greenhaven Berwick-on-Tweed . . .	Aug., 1960
Broadbent, Mrs., Greenhaven, Berwick-on-Tweed . . .	Aug., 1962
Buglas, Miss E. A., 57 Castlegate, Berwick-on-Tweed . . .	June 1961
Bodenham, N. H., The Barn, Snitter, Thropton . . .	July 1961
Crombie, Miss Margaret, 9 St. Helens, Spittal, Berwick-on- Tweed . . .	June 1959
Curle, Mrs. C. L. Easter Weens, Bonchester Bridge, Hawick .	June 1960
Carrick, Mrs. Z., 15 Cheviot Terrace, Coldstream . . .	June 1961
Curry, Rev. O., 64 Ravensdowne, Berwick-on-Tweed . . .	Aug., 1961
Calder, Miss Elizabeth F., Middlestotts, Duns . . .	June 1962
Davidson, Mrs. M. I., Horseley, Reston . . .	June 1959
Dickson, Miss Mary, 71 Gala Park Road, Galashiels . . .	July 1959
Davidson, Miss A. E., Beechknowe, Coldingham (was pre- viously a Junior member) became an adult member from	Feb., 1961
Dickinson, Miss G. I., Greenside Avenue, Berwick-on-Tweed	July 1961
Fleming, Mrs. D. F., Struan, Berwick-on-Tweed . . .	May 1960
Furness, Lady, Netherbyres, Eyemouth . . .	June 1961
Hogg, Mrs., 2 Forrester Road, Corstorphine, Edinburgh 12 .	Oct., 1959
Hutchison, Miss C., The Chesters, Lauder . . .	June 1960
Jeffrey, Mrs. R., 49 Market Square, Duns . . .	June 1960
Jaboor, Mrs. S. M., Manorleigh, Scotts Crescent, Galashiels .	June 1961
Jamieson, Martin A. J. D., Kirkbank House, Paxton . . .	June 1962
Jamieson, Mrs. A. M., Kirkbank House, Paxton . . .	June 1962
Keenleyside Mrs. N. E., 10 Bondgate Without, Alnwick . . .	June 1959
Kirtley, Mrs. H., 66 Ravensdowne, Berwick-on-Tweed . . .	Aug., 1961
Kohler, Mrs. P., 23 Swansfield Park Road, Alnwick . . .	Oct., 1961
Lawson, Mrs., 4 Scott's Place, Berwick-on-Tweed . . .	Dec., 1958
Logan, Mrs. Eleanor, East Fenton, Wooler . . .	Feb., 1960
Little, Miss D. D., Crochet Knowe, Galashiels . . .	Feb., 1960
Moralee, Mrs. E., North Charlton, Chathill, Northumberland	June 1959
McCreath, G. C., Bondington, Castle Terrace, Berwick-on-Tweed	June 1959
Mitchell-Innes, Mrs. M. G., Whitehall, Chirnside . . .	June 1960
Murray, Mrs. Jean N., Otterburn, Morebattle, Kelso . . .	June 1960
MacGregor, Dr. R. B., C.M.G., Ayton Mains, Ayton . . .	June 1960
Middlemas, Mrs., Roseworth, Kelso . . .	June 1960
Mitchell, Mrs. A. P., Strathlyn, Birgham, Coldstream . . .	July 1960
Mole, Mrs., Greenburn, Reston . . .	June 1961
Mitchinson, Miss I., Cookstead, Cornhill . . .	Aug., 1961

Maclaughlan, Rev. Frank, The Manse, Swinton	June 1962
Ogilvie, Mrs. H. M. E., Chesters, Ancrum, Jedburgh	June 1960
Purves, Mrs. E. B., Deneview, 13 Railway Street, Berwick-on-Tweed	June 1959
Pate., Mrs. H. K., Redpath, Duns	June 1959
Price, Major J. H., Dilwyn, Cornhill Road, Tweedmouth	June 1960
Pate, Miss J. M., Cairnbank, Duns	June 1960
Pate, Mrs., West Blanterne, Duns	June 1960
Patterson, Mr. W. Y., Mill House, Linstock, Carlisle	Sept., 1961
Robson, Mrs. D. C., Overblane, Wooler	Feb., 1961
Robertson, Miss I. M., Struan, Northumberland Avenue, Berwick-on-Tweed	April 1962
Smith, Mrs. F. E., 2 Southern Crescent, Bramhall, Cheshire	July 1959
Smout, Mrs. E. S., 1 Mansfield Road, Tweedmouth, Berwick-on-Tweed	Jan., 1960
Smith, J. E. Torrance, 20 Castle Terrace, Berwick-on-Tweed	Feb., 1960
Somervail, Mrs. D., Alan Bank, Lauder	June 1960
Stephenson, A. C. R., The Square, Newton-on-the-Moor, Felton, Northumberland	July 1960
Stewart, Mrs., Allerton, Jedburgh	June 1960
Todd, Mrs. Phillis R., Manor Hill, Kelso	Oct., 1959
Thompson, Miss E. M. C., M.A., F.S.A. Scot., 37 Ann Street, Edinburgh 4	June 1960
Thorburn, Mrs. M. B., 1 Windsor Crescent, Berwick-on-Tweed	Oct., 1960
Telfer, Miss Morag, Caverton Mill School House, Kelso (transferred from Junior Member to Adult Member)	Jan., 1961
Weatherston, Miss J. F., 3 Greenside Avenue, Berwick-on-Tweed	June 1959
Wood, G. T., Fern Neuk, Coldingham	June 1959
Wilson, Mrs. M. L., Glenholm, Horncliffe	July 1960
Younger Miss, 2 Ord Hill House, Berwick-on-Tweed	June 1960

NEW JUNIOR MEMBERS

since September 1958.

Wardale, Master John, Akeld Manor Wooler	Oct., 1958
Hood, Miss Isabel, Townhead, Cockburnspath	Mar., 1959
Hood, Master John, Townhead, Cockburnspath	Mar., 1959



ILLUSTRATIONS

PART I.—1962. .

Photos of Churches :—

Ayton; Edrom (Norman Apse); Eccles (interior);
 Swinton (Laird's loft at east end); Westruther (1840);
 Bonkle (Norman Apse); Ladykirk; Greenlaw; West-
 ruther (1649 altered 1752); Coldingham Priory; Leger-
 wood (Norman Arch); Bassendean . . . between pp. 14 and 15

Polwarth Church and Ayton Church facing p. 30

Excavation and Restoration of Roman Wall below Willow-
 ford Farm between pp. 30-31

Over Denton Church, Cumberland, and
 Corstopitum Granary facing p. 31

No. 9 Marygate, Berwick—Demolition facing pp. 38-39

Cup and Ring Marked Stones, Goswick Sands, and
 Tam's Cross, Wrangham between pp. 62-63

HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

The Centenary Volume and Index, issued 1933, price 10/-,
is invaluable as a guide to the contents of the *History*.

16.A.



HISTORY

OF THE

BERWICKSHIRE NATURALISTS' CLUB

INSTITUTED SEPTEMBER 22, 1831

"MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM"

VOL. XXXVI. Part II.
1963

Price to Non-Members 20s.

BERWICK-UPON-TWEED
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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

BERWICK-ON-TWEED

Address delivered to the Berwickshire Naturalists' Club at Berwick, on 9th October, 1963, by Major C. J. Dixon Johnson, T.D., F.S.A.Scot.

I am going to talk to you tonight about the part of the country where we are now living. One often hears people talking about Berwick and Scotland as if Berwick had only ceased to be part of Scotland in recent times, perhaps they are a bit mixed up with the Wales and Berwick Act passed during the recent war with Russia, recent of course from a historical point of view.

I will endeavour to put the facts before you so that by the time my little talk is over you may know when Berwick was part of Scotland, when part of England and for how long it was part of the former and for how long it has been part of the latter.

The first mention in history of this part of Great Britain is in about 80 A.D. when the Romans had penetrated as far north as Tweed and were in possession of the whole of Britain south of that river.

Further north, and possibly south as well, the country was at that time occupied by people whom the Romans called Caledonians. These people so often raided into Roman held

country that the Romans were forced to advance to the Forth Clyde valley where they built a rampart or wall from coast to coast.

After the departure of the Romans from Britain between 410 and 420 A D the local population had it all their own way in these parts until they were invaded from overseas by the Angles.

The Angles fought against the local Celtic population and by 547 were in such a strong position that they were able to form the Kingdom of Northumbria.

This Kingdom, which stretched from Humber to Forth and at times even extended into Aberdeenshire, consisted of two provinces, sometimes united and sometimes divided into separate petty kingdoms. The northern province called Bernicia included what is now the Lothians, Berwickshire and Peeblesshire as well as the easterly parts of Roxburghshire, Northumberland and County Durham.

The prosperity of the Kingdom of Northumbria began to decline in 685 when the Pictish King Brude defeated King Egfrith in a battle at Nectan's Mere in what is now Forfarshire, but it was not until late in the 9th century that the Danes, who had first landed on Lindisfarne in 793, swept up from the south and obtained possession of the whole Kingdom from the Angles.

The Angles had been in possession of the Northumbrian Kingdom for some 300 years, and it is interesting to note at this point that although the seat of government of the southern part of this island was eventually settled in the south under a Saxon King, the name of the country was and still is England, and the language English not Saxon, Danish, Norman, French or any of the other languages it might have been if one considers the different races who have ruled over it.

The Danish rule of Northumbria, still stretching from the Humber to the Forth remember, continued until the Saxon King of Wessex, King Edmund, drove out the last two Danish

Kings in 944, in his efforts to consolidate the country under his rule, and reduced it to an earldom in 954.

In 1018 there occurred at Carham a big battle in which the Northumbrian Prince Eadulf Cudil was heavily defeated by Malcolm, King of Scots.

After which battle Malcolm was able to claim Tweed as his southern boundary, though in 1031 and on several other occasions homage was done to the King of England for the annexed territory north of the river.

Before the battle of Carham, Bamburgh was the capital of Northumbria, and we are told that if Berwick existed at all it was a mere village at the mouth of Tweed.

The land on which Berwick, north of Tweed, now stands, remained Scottish territory from 1018, the date of the battle of Carham, until 1174, when by the Treaty of Falaise, it was handed over by William the Lion to Henry II, after which it remained in the hands of the English until 1189 when Richard the 1st sold the homage of the Scottish King for the annexed territories and gave him Berwick, when the town may for the first time be said to be really part of Scotland. During the reign of King David Berwick was made one of the first four Royal Burghs, an honour which it still holds.

Berwick remained part of Scotland until seized by Edward 1st of England, who was known as 'Mallus Scotorum', after terrible slaughter in 1296, after which it remained English until it was recaptured in 1318, some say by treachery.

In spite of a terrific siege by land and sea by Edward II it remained in Scottish hands for 14 years until retaken after the Battle of Halidon Hill in 1333. The site of this battle, just outside the town, is marked by a large stone erected by the Club.

Although many times attacked, and sometime taken by the Scots, Berwick remained in England until 1461 when Henry IV gave it to Scotland in return for the many kindnesses shown to him and his family when in exile in that country.

Not until 21 years later did Berwick again become English, when on 25th August, 1482, it was surrendered to the English Army, commanded by the Duke of Gloucester, by Lord Hails who was unable to get any help from Scotland to defeat the besieging army.

Berwick has been in English possession and Government ever since.

So much for that part of the present borough north of Tweed. The early history of the south of Tweed is much the same as the north up to the battle of Carham in 1018 when, of course, it remained English.

The territory immediately to the south of Berwick, though forming part of the Northumbrian Kingdom, had been given by King Oswald to the Church of Lindisfarne, probably in 635, when the see of Lindisfarne was founded and became in course of time part of the great County Palatine of Durham which was ruled over by the Prince Bishops in every way as if they were kings.

This continued until 1559 when Bishop Tunstall, having refused to take the oath of supremacy to Queen Elizabeth the 1st, was deprived.

The temporalities of Norham and Islandshires, then known as North Durham, were never restored to the Bishops, and this separation *de facto* was confirmed by Bishop Toby Mathews to James I in 1603. Palatine rights were however continued by succeeding Bishops until 1836 when they were resumed by the Crown.

The Palatine Court of Co-Ordinate Jurisdiction with the High Court still exists however, and continues to exercise its ancient powers on behalf of the Crown.

Queen Elizabeth I, on taking over the temporalities of Norham and Islandshires, leased them to her cousin, Henry Carey, who in 1603 sold them to Lord Dunbar for £6,000. The Earl of Dunbar died in 1611, leaving two co-heiresses, the second of whom married Theophilus 2nd, Earl of Suffolk, from

whom the Corporation of Berwick bought the Manor of Tweedmouth, including Spittal, in 1657 for £570.

Tweedmouth and Spittal did not, however, become part of Berwick until the passing of the Municipal Corporation Act in 1835 and have never been part of Scotland.

North Durham, Norham and Islandshire, remained part of the County of Durham until 1844 when because of the inconveniences and grievances arising out of the distance which separated them from the rest of the county they were attached to the County of Northumberland.

DATE TABLE

- 547 Kingdom of Northumbria
- 840 approximately, Danish Kingdom of Northumbria
- 944 Danes driven out
- 955 Earldom of Northumbria
- 1018 Battle of Carham
- 1175 Treaty of Falaise
- 1189 King Richard gave Berwick to Scotland
- 1296 Berwick seized by Edward I
- 1318 Captured by Scotland
- 1333 Halidon Hill
- 1461 Henry IV gave Berwick to Scotland
- 1482 Given up to English under Duke of Gloucester

Taking 547 as the beginning to 1963 is 1416 years out of which Berwick can be said to have been Scottish for 143 years *i.e.*, between 1189 and 1296, 1318 and 1333, 1461 and 1482, though if you count the 157 years between the battle of Carham and the treaty of Falaise, during which Berwick was ruled by Scottish Kings under homage the total is 300 years.

C. J. D.-J.

SECRETARY'S REPORT

This past season has been perhaps one of the most successful as regards weather, the number of members attending, and the variety of places visited. The Secretary has been helped greatly by the co-operation of both council and members, and expresses his sincere thanks.

The Club should be grateful indeed to those who have so kindly opened their houses and grounds to us, and who, in so many instances, have gone out of their way to make our visits interesting. The Secretary has ever tried to arrange visits to new districts, and although some of these may have been rather a long way off, they have been well attended and enjoyed by all the members.

The meeting at Whittinghame and Shawdon Hall was a memorable one. At the Roman Catholic Church, Glanton, were shown the chalice and vestments from the 16th century chapel of the Clavering family. Whittinghame Church and its heraldry were described by Major Dixon Johnson. Shawdon Hall was admired as a fine example of late Robert Adam architecture. Earlier in the day the battle-field of Hedgely Moor had been visited, and the story told by Captain Walton.

About a hundred members attended the meeting at Chesters and Corbridge on 12th June in brilliant weather, and were glad to have the chance of another 'Roman' Meeting so kindly arranged by Miss Donaldson-Hudson.

Perhaps the most successful outing of the year was the visit on 11th July to Haddington, where the Club had the honour of being conducted over the town by the Planning Officer for East Lothian, and shown all the recent reconditioning of the buildings. In the morning Dirleton Castle had been visited, and after luncheon the members were conducted round the beautiful Abbey Church of St. Mary.

As is customary the August Meeting was principally outside when a Bronze Age Camp was visited near Ruberslaw. Here Miss Winifred Simpson spoke. In the morning Bedrule Church was filled with members while the President, Major Dixon Johnson explained the Heraldic decorations within the church.

There was a full day in September when Bamburgh, Spindleston, and Craster Tower, were visited. Owing to the illness of the Secretary, the President, Major Dixon Johnson very kindly organised and took charge of the meeting.

Full notes on many of the places visited during the season can be read in this issue of the 'History.'

The Annual General Meeting was held in the King's Arms Hotel, Berwick-upon-Tweed and was well attended. The President's Address on the town itself was of unusual interest in its aspects, and was greatly appreciated.

It was with regret that the Club accepted the resignation of Tom Purves, Esq., who, for many years, has acted as Honorary Treasurer. Mr. Purves is a well known member, and his kindness, helpfulness, and consideration for all the members of the Club has ever been highly appreciated. Miss Purves, who in so many ways has helped her brother, was also thanked for her work. Later, Mr. Purves was presented with book tokens on behalf of the Club, and was made an Honorary Member, an honour which was also extended to Miss Purves.

The Club was fortunate in having been able to find a new treasurer in Martin Jamieson, Esq., of Kirkbank, Paxton, who has kindly consented to take the reins from Mr. Purves.

The new President, Miss Ruth Donaldson-Hudson, was given the flag of office and welcomed by the Club. Miss Donaldson-Hudson belongs to a well known Shropshire family, but for many years has been resident on Tweedside and in the north of England, and has been for years a valuable member of the Berwickshire Naturalists' Club.

At a later meeting a film show was held when films made by members were seen and much enjoyed.

TREASURER'S REMARKS, 1963

Mr. President and fellow members, I have pleasure in submitting Treasurer's Financial Statement for year ending 20th September, 1963.

I have to report a surplus on the Season of £40 13s. 8d.

Income from subscriptions, entrance fees, etc., for the season amounted to £483 2s. 0d., Expenditure for the season amounted to £442 8s. 4d., showing a surplus of £40 13s. 8d.

The Credit Balance on General Account at commencement of season was £26 5s. 11d., add surplus for year £40 13s. 8d., giving a credit balance on General Account at end of season of £66 19s. 7d.

The Club's Reserve Account with the Trustees Savings Bank now amount to £205 17s. 5d.

The Balance Sheet shows cash in National Commercial Bank £66 19s. 7d., and in Trustees Savings Bank £205 17s. 5d., a total of £272 17s. 0d.

FLODDEN FIELD MEMORIAL FUND

This, with interest added, now amounts to £52 5s. 10d.

I think the Berwickshire Naturalists' Club's finances are in quite a satisfactory condition with cash assets of £273.

The Club's Books and accounts have been audited by Mr. P. G. Geggie of the National Commercial Bank, and I would like to take this opportunity of thanking him for his kindness in doing so.

ST. MARY'S ROMAN CATHOLIC CHURCH, GLANTON

After the Reformation there were a number of families in this district who adhered to the Roman Church. Among those old Roman Catholic families were the Collingwoods and the Claverings of Callaly Castle. These recusant families, as they were called, often kept a priest who served the whole district. The priest in this case resided at Callaly Castle. Jesuit priests were the usual ones chosen. The Collingwoods were often in trouble for having mass every Sunday quite publicly. In 1715 the Earl of Derwentwater raised his standard near here and Roman Catholics rallied to it, but the whole rising fizzled out and the Earl lost his head in London. The Collingwoods also lost both heads and estates which were sold to Protestants. After the last of the old Roman Catholic families died out, it was necessary to erect a church to take the place of the private chapels which had formerly been used, and the present church was built in 1881.

CHURCH PLATE

A. CLAVERING CHALICE.

Although the inscription recording the gift with the date 1671 is obviously recent, it probably replaces a contemporary one. The design was evolved in the 1630's and remained popular right through the reign of Charles II and slightly varied, even into the 18th century. It seems to have been used by several London goldsmiths and no provincial example has yet been noted.

B. CHALICE.

Parcel gilt, the bowl decorated with applied wavy rays ("cut-card" work).

None of the examples of this design which have come to light so far, are either hall-marked or dated. They were

probably being made in the earlier part of the reign of Charles I and known provenances suggest they were made in the north, presumably at York.

C. MONSTRANCE. Probably c. 1680.

The circumstances under which the earlier recusants worshipped did not give much scope for the use of monstrances, but the earliest existant example which I have noted goes back to the reign of Charles I. They were certainly being used more freely in the second half of the 17th century, but examples made before 1700 are rare. All known examples are of London make.

D. CHADWICK CHALICE. Middle of the 16th century.

This chalice was made by a goldsmith who still retained the medieval tradition and who had in his workshop the old moulds for making the angel heads which decorate the knop. The foot does not unscrew—this suggests that it is of early date as the recusant chalices made before 1700 were regularly made to unscrew in order to facilitate concealment. Another feature which suggests this piece is of early date is that the accompanying paten is engraved on the top. After 1600 it became usual to engrave only the underside of patens. There does not appear any reason to suppose that this chalice was made out of London.

Remarks of Charles Oman, keeper of the silver at Victoria and Albert Museum, 21st July, 1962.

WHITTINGHAM CHURCH

By Major C. J. DIXON JOHNSON, T.D., F.S.A.Scot.

Whittingham Church, which is now dedicated to Saint Bartholomew, stands on the site of an old Saxon Church which was probably built in about 773 during the reign of King Ceowulf, and still retains in the tower, a part of that Church. The tower rises abruptly from the ground without indication of base or plinth, and the corner stones are built in the typical method of the period, a long upright block alternating with a short horizontal one considerably broader. In 1090 the tithes were granted to the monks of Tynemouth, but in 12c King Henry I gave them to the Priory of Black Canons in Carlisle, and eventually the patronage passed to the Dean and Chapter of Carlisle.

The window, next the pulpit, contains an interesting fragment of old English architecture, the upper part of the light being formed from a single stone.

An old Piscina, under a trefoil headed canopy, is to be seen in the south wall of the south arm in what was before the reformation St. Peter's Chantry.

There are two bells in the tower, the smaller being $20\frac{3}{4}$ inches in diameter and $21\frac{1}{2}$ inches high, and the larger, which is the bell of the Jubilee Clock, 24 inches by $22\frac{1}{2}$ inches.

The Jubilee Clock was put in in 1887 and was set in motion by the twin sons of the then late Hargrave Pawson of Shawdon.

There are two vaults—that at the east end of the Clavering family and that near the porch of the Collingwood or Ogle family.

At the south-east corner of the Church yard, beside one of the two picturesque "Stiles," is a plain Latin Cross head set in a chamfered socket stone.

HERALDRY IN WHITTINGHAM CHURCH

Whittingham Church is fortunate to have preserved in it six handsome hatchments of representatives of local families as well as several heraldic memorials.

On the north wall of the nave we have first the hatchment of Henry Liddell, 4th Bart. and first and last Baron Ravensworth of the first creation. He was born in 1708 and died in 1784 without male issue. His wife was Anne, daughter of Sir Peter Delmè, Kt., and Lord Mayor of London. His hatchment shows argent a fretty gules on a chief gules three leopards faces or (for Liddell) and impaling or an anchor sable between two lions passant or (for Delmè). The crest above a visored helm is a lion rampant sable crowned or and the supporters are two leopards rampant or semi of roundels purple and the motto is *Unis et Idem* which with *Fama Semper Vivit* is used by the present Lord Ravensworth.

The next hatchment is that of his nephew Sir Henry George Liddell, 5th Bart., 1749-1791, who married Elizabeth, daughter of Thomas Steel of Hampsnet in Sussex. It shows Liddell as before except for the addition of the Red Hand of Ulster and impales gules a bend chequy ermine and sable between two lions heads erased or and on a chief azure three billets or for Steel of Hampsnet. The crest is a lion rampant sable crowned and billety or and the motto shown is *Fama Semper Vivit*.

The last hatchment on the north wall is that of Sir Thomas Henry Liddell, 6th Bart., 1773-1855. He was made Baron Ravensworth in 1821, and succeeded his father as 6th Bart. in 1791. Lord Ravensworth was married to Maria Sussanah, daughter of John Simpson of Bradley, and his hatchment shows Liddell as before with on a shield of pretence quarterly I and IV gules a fess between two lions passant or (for Simpson of Bradley) II and III gules three oak trees argent and three interlaced annulets for difference (for Anderson of Bradley). The crest above a visored helm is again a lion rampant sable crowned and billety or and above that is a baron's coronet gold. The supporters are leopards rampant or semi of roundels purple each gorged with a mural crown purple.

The motto on the scoll beneath is *Fama Semper Vivit*. The Red Hand is shown in middle chief.

On the south wall of the nave we have first the handsome hatchment of William Hargrave of Shawdon, 1736-1817, who was married to Catherine, daughter and co-heiress of Samuel Shield, which shows quarterly I and IV azure a fess argent between three bucks at speed or (for Hargrave of Shawdon) II and III gules a lion passant between three escallops argent (for Shield) and over all in pretence the same arms of Shield. The crest is a buck's head erased and on a scroll beneath is *In Coelo Quies*. Mr. Hargrave was Sheriff of Northumberland in 1783, and the hatchment shows that his wife survived him.

The next hatchment is that of William Pawson of Shawdon who assumed the name and arms of Hargrave on inheriting that property. He was born in 1780 and died in 1854, having been married to Mary, daughter of Revd. Robert Trotter. It shows quarterly I and IV quarterly indented azure and gules on a fess argent between three bucks at speed argent three mascles azure between four ermine spots, II and III azure two chevrons between three lions gambes erased and erect or and impaling argent on a chevron gules between three boars' heads couped sable and a mullet gules for difference (Trotter—see Trotter of Morton in Fogo Church). Two crests—the dexter a buck's head erased quarterly indented argent and gules with upon it four roundels counter coloured, the sinister on a mount vert the sun in his splendour. Motto : *Fervente Deo*.

In the north arm is the hatchment of Adam Atkinson of Great Ryle, who built Larbottle House, and died in 1843. Ermine a fess sable between three pheons or. Crest upon a helm a pheon or and beneath the shield *in Coelo quies*. It is a pity to see this hatchment in such a bad state of repair.

On memorials round the church the following arms are to be seen :

To the left of the Altar on a memorial to Alexander Collingwood of Collingwood House, and his wife, Margaret, daughter of Nicholas Brown of Bolton ; argent a fess gules between three stags' heads erased sable with in pretence gules three bears gambes or Crest a stag's head erased sable.

On south side of Chancel on a memorial to James Hargrave, who died in 1777, aged 76, and his only son, William, who died sp. 1817, aged 81—a fess between three stags at speed, crest a stag's head erased.

In the south arm on a memorial to Edith Mary, eldest daughter of George Cookson of Trelisic in Cornwall, wife of Alexander Brown of Callaly are the arms of Brown of Callaly per chevron gules and ermine three bears gambes erased and erect or impaling those of Cookson of Trelisic per pale argent and gules two legs couped at the thigh in armour counter changed with a mullet for difference.

On the south wall of the nave are three heraldic memorials to members of the Atkinson Family and in the north arm on a memorial to Reginald Cyril Goodenough, who fell at the age of 17 in the Great Redden Battery at Sabastapol, in 1850, are the arms of his family—or on a chevron gules between three drops of blood, crest a demi wolf rampant proper holding between his forepaws an escallop shell argent. The motto is *Ad Sanguinem*.

TREASURE ON HOLY ISLAND

During the demolition of an old cottage on Fidler's Green, Holy Island, on 14th September, 1963, workmen found the following coins buried approximately 2 feet below normal level under a cobble floor with a lime floor on top of that. They were verified by Mr. John Walker of the dept. of coins of the British Museum and were declared by an inquest to be Treasure Trove. They were found in a brown earthenware jar.

16 Groats (Queen Mary).

4 Sixpeny pieces (Mary and Philip).

3 Groats pieces.

4 one shilling pieces (Elizabeth I).

6 sixpenny pieces (Elizabeth I).

14 groats (Elizabeth I).

3 bawbees (Queen Mary).

ST. MARY'S PARISH CHURCH, HADDINGTON

This large and beautiful building, which stands near the river Tyne, has for five centuries been the greatest treasure of the town of Haddington. This building, referred to in the town's earliest records as "the parochie kirk," is one of the largest and finest parish churches of its period in Scotland.

The first reference in history to a church in Haddington occurs in c. 1139 when David I granted a charter to the recently founded Priory of the Augustinians at St. Andrews, giving the monks the church of St. Mary, with the chapels, lands and rights belonging to it.

The church consists of chancel and nave both with aisles, aisleless transepts, and tower over the crossing. The dimensions of the building are : total length 206 feet, breadth 62 feet ; the transepts 113 feet in length ; the tower 90 feet in height. The date of the building is considered to be the late fourteenth century or the early fifteenth century. Records show that in 1426, and in subsequent years, many gifts, including chalices for the altars were bestowed on the church which would suggest that by that time, at least, the church was well established.

The church suffered much damage at the siege of Haddington in 1548-49 when the town was held by the English and besieged by the Scots and the French. The ruinous condition of the choir dates from this period as nothing appears to have been done to repair the damage at the time, and after the Reformation the choir, being no longer in use for public worship, was simply allowed to remain as it stood until modern times when the tracery of the great east window was replaced. There has also been carried out considerable strengthening of the foundations to prevent the total collapse of the choir and possibly the tower. The tower, as it stands, rises to a height of ninety feet, and was probably surmounted by an open stone

coronal, the four corbelled projections for the spring of the coronal ribs being still in place on the wall heads. The tower had originally three bells which remained in the bell-chamber till 1549 when they were carried off by the English army on their giving up the occupation of the town. Tradition has it that the bells were taken to Durham and later recast.

The nave, which consists of five bays, is the only part of the building which is in use for public worship today. Sometime before 1603 there began the erection of lofts for the accommodation of the Trade Incorporations, for in that year, the Magistrates decided to erect a loft for the Town Council alongside that of the wrights and masons. Eventually there were a whole series of these lofts arranged in three tiers, one above the other, which provided accommodation for the heritors, the town council, the nine Incorporated Trades and the scholars. In 1810-11 these were all removed, and the pillars were heightened by 6 feet 4 inches, in order to raise the height of the arches to provide space for higher and larger galleries. In 1891 the interior fittings of the church were again removed, the galleries taken down, and the level of the floor lowered to uncover the bases of the pillars. At this time, a west gallery was erected to provide additional seating accommodation, and an east gallery to accommodate the choir and organ. The original stone rib-vaulting of the aisles of the nave was removed during these alterations and replaced with plaster.

The choir which consists of four bays was ceiled with rib-vaulting as were the transepts. The east walls of both choir aisles and transepts are blank to allow for altars being placed against them. The piers of the choir arcades are at their original low height.

In the early records of the town of Haddington there are references to the altars in the church which are known to include the following : The High, the Rood, the Trinity and the Holy Blood ; and those dedicated to the Virgin Mary, St. Michael the Archangel, St. Andrew, St. James the Greater, St. John the Baptist, St. Peter, St. Thomas, the Three Kings of Köln, St. Blaise the patron saint of woolcombers, St. Crispin and St. Crispianus, the patron saint of shoemakers,

St. Eloi, the patron saint of smiths and St. Nicholas. An escallop shell is carved on the westmost pier of the north side of the church, and this probably indicates the site of the altar of St. James the Greater, since pilgrims who made a pilgrimage to the shrine of St. James the Greater at Compostello in Spain, wore as a badge of their pilgrimage an escallop shell fastened to their hood or hat. That pilgrims did set out from Haddington is evident. In January 1410-11, John of Haddington was guaranteed by the English safe conduct on a pilgrimage "to St. Jakes's" (St. James's) in fulfilment of a vow, and in 1535 Thom of Kello was given leave to pass to St. James's or wherever he pleased. The Town Council were the patrons of St. James's altar.

The church has close associations with the Reformation, for in 1545, about Christmas time, George Wishart preached in the church on two days. On these occasions he was accompanied by John Knox, but there is no record of Knox having preached in the church, although there is every probability that he did so several times between 1561 and his death in 1572 as in the inventory of his estate it was shown that he had a pension from the Kirk of Haddington.

Within the choir of the church is the grave of Jane Welsh, the wife of Thomas Carlyle, who made many an annual pilgrimage to this spot between 1866 and his own death in 1881.

Although there is no record that the poet Robert Burns was ever in Haddington, his brother Gilbert and his family were connected with the church, and on 22nd June, 1808, Gilbert Burns was ordained as an Elder.

Although the name *Lucerna Laudoniae* was originally applied to another Haddington church, that of the Franciscans, which was destroyed by the English in the fourteenth century, by long tradition and common usage the name in its English equivalent, "The Lamp of Lothian" has been most fittingly applied to this venerable and beautiful church.

BEDRULE CHURCH

By Rev. THOMAS MCGINN

The present church, as a plaque in the porch indicates, was built in 1804, rebuilt in 1877, and altered and enlarged in 1914.

The following notes are taken from a paper read by Mark Robson, Denholm to Hawick Archaeological Society in 1882.

The name Bedrule, according to the late Rev Archibald Craig and others, means "the good situation by the rumbling-noised river," and is, like the name Rule, of Gaelic origin. It used to be Badruchail, Betheroule, Badroull, and now Bedrule. Others claim that the name is derived Bethoc's rule, after the lady Bethoc, to whom Bedrule belonged. Most authorities think it is evident that the first explanation is the better.

The extreme length of the Rule Water is twelve miles, and embraces some of the finest scenery of the Borders. At the bridge, which crosses the stream near the manse, in the bed of the stream, are, some immense boulders, one in particular is called "Samson's Stane," which the children solemnly believed Samson pitched from the summit of Ruberslaw. Further down the Rule water we have Pirn Mill (now Bedrule Mill) where stood one of those mills which manufactured the rough sort of cloth worn by the peasantry called waulk.

The church of Bedrule dates back from before the Reformation, although the old building has been renewed from time to time. The Session records, which dated back to somewhere about the year 1660, contained much interesting material, have unfortunately disappeared, and have never been recovered.

After the Reformation had taken root in Scotland, Joseph Tennant was the first Reformed Pastor of Bedrule; then followed David Fowlis, and succeeding him came Henry Peirson. Peirson was disliked by the Covenanters, who hated

him because of his leanings to Episcopacy. He at last was removed by them from the pastorate. Henry Elliot was the next minister, and after his death the church was vacant for five years, after which Hugh Scott officiated. Scott was as much hated by the Episcopalians as his predecessor Peirson had been by the Presbyterians, and they had their revenge on the Presbyterians by turning the hated Scott out of the church. James Adamson followed, then came James Borland, who was the first minister after the English Revolution of 1688-89. There followed in succession as ministers here, Dickson Brown, then Archibald Craig, the latter being considered one of the finest Greek scholars of his age. The charge then fell to the Rev. John Stevenson, then to the Rev. J. Drummond Gordon, 1923-44, who was followed by the present minister the Rev. Thomas McGinn who was inducted on 15th June, 1945.

The Name Turnbull.

There was a clan in this neighbourhood, but further south a little from Bedrule, and prior to the time of Bruce, bearing the name of Roull, but a few years after the time of Edward I of England, the name of the clan, or at least of the chief, was changed, being no longer Roull, but Turn-e-bull, and then shortly, Turnbull.

The story of the origin of this name is that William of Rule was a man of immense bodily strength, and it is said that one day he happened to be with Robert the Bruce when that king was hunting in the woods of Callander. Bruce was pursuing a wild bull, but, in course of time, the tables were turned, and the bull pursued Bruce. It unhorsed him, and was on the point of finishing him off when William of Rule rushed to his aid, overthrew and killed the bull and so saved the Bruce's life. Doubts have been thrown on this story, but from the fact that a grant of land was made to William of Rule immediately after he is called Turn-e-bull, it would appear to be the truth. The Turnbull coat of arms (one on the plaque in the church and another on some tombstones in the old churchyard) have the Bull's head and the words "I saved the King."

They got the name, some say it was well deserved, of being the fighting Turnbolls. Deeds of cruelty, of clever theft, of bloody raids, go to make up the dark list of their crimes. They leave nothing much to be admired except their courage and great daring. But there was one individual among the Turnbolls of Bedrule of whom we can speak well, and I pass now to a subject that gave us immense pleasure here at Bedrule in January, 1951, when a service was held in the church of Bedrule to commemorate the 500th anniversary of the founding of Glasgow University by William Turnbull of Bedrule, 25th Bishop of Glasgow. After the service a torch was lit at a bonfire and this torch was carried by a series of runners drawn from the members of the Glasgow University Athletic Club by way of Melrose, Peebles, Stobo, Lanark to Glasgow University.

This William Turnbull, who founded Glasgow University in 1451, was a native of Bedrule. He studied at St. Andrews University where he registered as a student in 1420 and later graduated Master of Arts and Bachelor of Canon Law. He matriculated at Louvain University in 1431, became Lord of Provan and Keeper of the Privy Seal of Scotland in 1440, was appointed Prebendary of Barlanark in 1434, Archdeacon of Lothian in 1443, Bishop-elect of Dunkeld and Bishop-elect of Glasgow in 1447, and was consecrated Bishop of Glasgow in 1449 and died on 3rd September, 1454.

Sir Walter Scott had a connection with Bedrule through his legal work for the name of Walter Scott, Advocate, appeared as counsel for the heritors of Bedrule in May, 1793, when they craved interdict against a committee of the Presbytery of Jedburgh concerning the erection of a new manse at Bedrule at the expense of the heritors. The heritors' objections were repelled. Again in 1801 Walter Scott appeared on behalf of the heritors in an application by the minister of Bedrule to the Teind Court for an augmentation of stipend. The objections stated by the heritors were sustained on 8th February, 1804, by Alexander Fraser Tytler (Lord Woodhouselee).

BONCHESTER HILL FORT

By WINIFRED SIMPSON

The fort is surrounded in most of its area by two ramparts, but in some places there are two or more outlying earthworks. It was excavated in 1906 and more thoroughly in 1960 by C. M. Piggott. The conclusion reached was that the earliest enclosure is the inner one consisting of a stone wall of rough dry stane dyke type.

The 1960 dig revealed a very good sample of walling with large stones, some of which appear to have been squared. The first layer of stones is in a vertical position with a horizontal layer on top. This arrangement is frequently found in Dark Age forts. The position of this walling was pointed out, but of course the excavations have been filled in and the site is now grown over with grass.

The outer rampart consisted of a double palisade. This was indicated by the positions of the post holes. The sites of numerous hut circles were also pointed out.

The number of finds made at the site has been disappointingly few, and consist of: La Tene brooch, approximately first century A.D.; ring headed pin; blue bead believed of the Dark Ages; four saddle querns; one rotary quern.

The date of the earliest fort is said to be the first century A.D., or only a little earlier. There was very little, if any, occupation of the fort during Roman times, but there was re-occupation and further building in the Dark Ages.

There are other earthworks and enclosures whose date and purpose have not been determined as they have not been excavated. These may be contemporary with the fort, but are probably later, perhaps even medieval.

The fort is described in the Proceedings of the Society of Antiquaries, Vol. LXXXIV, p. 113, and in the Inventory of Ancient Monuments of Roxburghshire.

BAMBURGH CHURCH

By H. BIRKETT

History tells us that Aidan had a church and chamber not far from the royal city on the rock of Bamburgh and it seems to suggest that the present Parish Church is the site of Aidan's wooden church.

Indeed, Aidan is supposed to have died at the north-west corner of his wooden church which site is now occupied by the chancel, and an inscription marks the site.

The present church is one of the finest Parish Churches in Northumberland—only Norham and Alnwick can come up to its standard. A considerable amount of restoration work has had to be done to preserve the fabric in good condition. Some people regard the low roofs as being detrimental to the general effect tending to force the eye downward rather than to lift it upward.

It is impossible to say whether the wooden church existed until the 12th century and no Pre-Conquest remains of stone have ever been found. In Norman times it seems there was a complete church comprising an aisleless nave with north and south transepts and a chancel. There are scanty remains of this Norman building in the southern part of the east wall of the north transept, also an original round-headed window.

The first addition to the church was at the end of the 12th century when an aisle was built at the north side of the nave and the north transept was enlarged. The South aisle followed later and as it is very wide this may indicate a 14th century date. This aisle may have been constructed to seat the people of the parish while the canons occupied the nave. Owing to the connection of the church with the important Augustinian house of Nostell, the chancel became a very stately addition to the fabric, and we must appreciate the artistic skill of the men who made such a thing possible. It took the place of

the Norman chancel when the canons of Nostell took full possession of the church in 1228. The windows of the south wall are filled with Flemish glass. The figures represent various saints and include Paulinus, Aidan, Oswald, Cuthbert, etc. The armour on the north wall of the sanctuary is of little significance or historic value. In fact, some endeavour has been made to have it removed, but local feeling wishes it to remain. It was the property of Fernando Forster, who died in 1701.

Under the chancel is the crypt which was perhaps built to keep in safety the relics of the church some of which may have been connected with Aidan. Its contents today are of little note. It had been the burial place of the Forster family, and after being closed for many years it was re-opened in 1847 when five coffins were found.

The tower is broad, unbuttressed, of four stages. The upper stage is modern. Probably all the west face of the tower has been renewed. The tower may originally have had a spire. The staircase up the tower is of the square newel type, a type extremely unusual in the Middle Ages.

The present bells above the ringing chamber were installed by Canon Williams, once a vicar of Bamburgh, and they make up the most northerly peal of bells in England. He it was who restored the belfry.

Recent additions to the church include the Oswald chapel in the north transept and the delightful re-conditioned font with its redecorated panels which give pleasure to many of our welcome visitors.

ARMORIALS IN BAMBURGH CHURCH

By Major C. J. DIXON-JOHNSTON, T.D., F.S.A.Scot.

In Bamburgh Church there are four hatchments, three armorial monuments and one shield of Royal Arms.

The hatchments are, with one exception, those of members of the renowned family of Forster of Adderstone and Bamburgh, who came into prominence early in the 15th century,

when Thomas Forster married Elizabeth, daughter and heiress of Roger de Etherstone.

The first hatchment is that of William Forster of Bamburgh, born 1667, died 1700, who married Elizabeth, daughter of William Pert (who married secondly William Lord Stawell, and died in 1748). It bears argent a chevron vert between three bugles sable, for Forster, impaling gules on a bend argent three mascles gules, for Pert. The crest is an arm embowed, hand and armour proper elbowed or grasping the truncheon of a broken spear argent. Motto : *Sta Sal Do*.

The second hatchment is that of John Forster of Adderstone, 1688-1745, who married Isabella, daughter of William Ord, of Sandy Bank, who is supposed to have died in 1788, but from the hatchment it would seem she died before him. Forster, as before, impaling sable three salmon palewise argent for Ord. Crest is shown as a Stag's head erased. Above the shield are the words "In Coelo Quies" and below it "Memento Mori."

The third hatchment is that of the most famous member of the family, Thomas Forster of Adderstone, the Jacobite General of 1715. He was captured at Preston, but managed to escape from Newgate Prison in 1716, and died at Boulogne in 1738, and was eventually buried in the Crypt of this Church. It bears Forster, as before, with crest a stag's head erased. Beneath the shield are the words "In Coelo Quies."

The fourth hatchment is a comparatively modern one being that of William George 1st and last Baron Armstrong of the first creation, born 1810, created Baron Armstrong, 1887, and died in 1900. He married Margaret, daughter of William Ramshaw of Bishop Auckland in County Durham. Having no issue his peerage became extinct on his death. Gules a tilting spear fesswise or headed argent between two dexter arms embowed in armour couped at the shoulder proper, elbowed and cuffed or hands extended proper. Crest, a dexter arm embowed in armour couped at the shoulder and encircled by a wreath of oak leaves, the hand grasping a hammer all proper. Supporters on either side a smith holding a hammer over the shoulder all proper. The badge of the

order of the Bath hangs below the shield and the motto is : *Fortis in Armis.*

On a white marble monument in the Chancel erected by Dorothy Forster, wife of Rt. Hon. Lord Crewe, Lord Bishop of Durham, being the last of her family, in memory of her brothers and sisters is the coat of arms of Lord Crewe, azure a lion rampant argent impaling Forster, above the Coat of Arms a Baron's Coronet.

On a monument of black marble, on the north side of the Chancel, to Sir Claudius Forster, Bart., who died in 1623, Quarterly Forster and Edderstone, *i.e.*, (arg) on a bend cotised sable three martlets (or) as recorded in the visitation of 1585. Motto : *Sta Sal Do.* Crest, on a wreath arm embowed (hand and armour proper) elbowed (or) grasping the truncheon of a shivered spear (argent).

On a monument in the north arm in memory of Richard Burdon Sanderson, died 1909, Paly of six (or and azure) on a bend (sable) three annulets (or) a canton charged with a sword erect (argent) (pommel and hilt or) surrounded with the collar of the Lord Mayor of London (proper) and for difference in the chief point a saltire humettée (counter changed of the field). Crest, a wolfe's head (arg) erased collared and chin reflexes behind the neck (all or) between a branch of palm and another of laurel and for difference on the neck a saltire humettée (gu). Motto : *Clarion ex osbcura.* Mr. Burdon Sanderson was High Sheriff of the County in 1892.

The Royal Arms at the back of the Church are those of King George III after 1814, when Hanover became a Kingdom and show on a inescutcheon the Brunswick Lions, the lion and hearts of Luneburg, the horse of Hanover and in the centre the crown of Charlemagne.

In Chaucer's 'Squires Yeoman' are the following words :

"a horn he bore, the baldric was of green

A Forster was he sothly as I ghesse."

C. J. D.-J.

CRASTER TOWER

By Sir JOHN CRASTER

The building of Craster Tower took place, so far as expert opinion goes, during the very end of the 13th, and very early part of the 14th centuries ; so that my family—having taken possession of the Craster Estate prior to 1168—obviously lived in another home on the present site. My late cousin, Sir Edmund Craster, told me that, in his opinion, this would have been something on the lines of a very large tithe-barn, with the family occupying one end, and the retainers the other ; but it is definitely known that this house was either on, or at any rate very near to, our present home.

The Pele Tower was originally of four stories, but was subsequently altered to only three, making each room higher than formerly ; and—until the addition of the present modern part—the only connection between the floors was a spiral staircase actually in the wall. Many years ago this staircase was thought to be rather unsafe, and was bricked-off at the top and bottom ; but it would be by no means difficult to make an entry about half-way up, in order to see whether it could safely be visible once more ; and my wife and I have sometimes contemplated having this done.

The walls of the Pele are such as to daunt the bravest of modern brick-layers, and this will be made clear when I say that—just prior to the 1st world war, when my late father was having central heating installed, and it was necessary to run a pipe through the wall—a single block of stone was removed which weighed 7 cwts.

Now, the basement room, with its vaulted roof and stone floor, is used as a wine cellar ; and is most admirably suited to this purpose by reason of the extremely limited variation in temperature between mid-summer and mid-winter. On

part of the wall may still be seen very vague outlines of arches and pillars, showing that some kind of wall-paper did originally cover both walls and roof. My father had the best pieces carefully removed, joined together in one section, and then sent up to the Victoria and Albert Museum for examination ; they were there pronounced to be hand-painted work of the 17th century, and to have been probably executed by an Italian artist. This is now framed, and hangs just outside the door of the drawingroom.

This drawingroom occupies the first floor of the pele and is—so I was told by the late Mr. Honeyman—one of the only three completely unspoilt Gothic rooms in the whole County. The walls are very unusual, in that what looks like a velvet covering is, in actual fact, sand blown on through a stencil, to form a raised pattern of ferns and leaves ; and was originally carried out well over 150 years ago.

Owing to changing times and circumstances, this room has been used for a variety of purposes. In the last war, when half the house was requisitioned (but not this room), in response to a request from the Company Commander, we allowed him and his wife to have it as a sitting-room ; whilst—after peace had been declared—my wife ran her local youth club there. By the time that this club moved down to Craster Village, the walls had become considerably altered in colour, and the carpet by no means wore an unused appearance ! After much thought, therefore, we decided—and many friends had also impressed this upon us—that it was really time to have the room thoroughly done up. To cut a long story short, we bought good second-hand sofa and chairs from the Royal Mile in Edinburgh ; and had the recovering, carpet, curtains, and all the painting carried out by local Firms. The raised sand pattern still shows, despite its extra coat of paint ; and—on expert advice—the cornice has been picked out in gold leaf, which seems to make a most admirable accompaniment to the three slightly varying shades of “ duck-egg-blue ” of the walls.

The fire-place contained a rather unpleasant semi-modern grate, so a local builder was employed to do a gradual excavation into the wall, and this resulted in the discovery of the

old bricks well buried ! These were utilised to make an open fire-place, which is now fitted with an old iron basket suitable for either logs or large coal.

In small hanging cases are family miniatures, and also a most excellent one of Admiral Collingwood, Nelson's Second-in-Command at Trafalgar ; and probably given to my ancestor, Admiral Roddam. In one corner is a heavy glass-fronted china cupboard, which was brought to Craster when my father sold Beadnell Hall ; this latter having been for many years the home of the Beadnell Branch of the Craster Family. On the north side hangs a portrait of Queen Anne, just to the left hand side of the alcove which—when this was a bedroom—would have been occupied by a huge four-poster.

The entrance to this room, from the 19th century part, is impressive, as it clearly shows the full extent of the six feet thick walls of the pele. Standing just beneath the framed section of the old wall-paper is a black wooden, lidded container which was at one time used to hold snuff in large amounts, and—so I have been told—was commonly found in coaching inns, to enable those stopping there to fill their own pouches from them ; presumably rather like the stuffed olives and little pickled onions to be found on bar counters nowadays !

I need waste no time on describing the "Tower Room", that occupying the second floor of the pele, since this is now merely used as a box-room, but was originally another bedroom, with the same alcove in the north wall as in the drawing-room.

The part of the house running out to the east, which was—prior to the 1914-1918 war—the servants' wing, was built much later than the pele, but earlier than the whinstone-fronted 18th century portion ; but the exact date of this addition is not known. Just outside the drawingroom door is an old painting on wood, showing this eastern part with a large conservatory in front of its south wall, and curving slightly to the east.

The modern part of Craster Tower is—as stated above—whinstone fronted, but the door and windows are surrounded by 'freestone,' chisel-worked blocks, and it is of interest to

recall that both whinstone and freestone were available from Craster Heugh, only some third of a mile as the crow flies from the site of the house. It is also of great interest to state that the 'fault' in the whinstone heughs through which the road runs to Craster Village, and of which the sub-soil is peat, divides the closely adjoining cliffs into a very good and very poor quality of stone. In old days, when the stone on the south (or Craster Estate side) was being worked, for road-stone ; with careful blasting, and skilled hand-work, kerb of up to 6 feet in length was obtainable ; whilst the stone on the north (Dunstanburgh Castle Estate)—although as good when crushed for road surfacing—would hardly provide 'setts,' let alone kerb.

The front door, which is a new teak one, still holds the massive lock which my ancestor recalls in one of his letters, when he built this portion in 1769 ! It is a lock of great interest, apart from its strength and workmanship, as it has a double action : the second turning of the key causing the heavy bolt to go twice as far into the container as did the first turn.

The west side of this modern structure is faced by freestone, as is the pele, and not of whinstone like the south ; and it is of interest to see the junction of ancient and modern, as the former contains much larger blocks of freestone than the latter. There are two different mason marks on the tower wall, a broad arrow, which is also to be seen on the west wall of Dunstanburgh Castle, in the main entrance ; and a mark which I have seen nowhere else, not even in a book of these marks.

The front hall is rather narrow, with two doors on the west or left-hand side, opening into the front and back libraries respectively ; these two rooms themselves being connected by a rather attractive arched double-doorway : whilst the door on the east side is that of the dining room, a large room with a big bow window facing the harbour, and with what *was* a perfect view of the sea, now—unfortunately—rather marred by a network of electric and telephone wires !

The dining-room table is highly polished, and has a nest of extra sections in a stand in the north east corner, enabling

the table—when all the sections are added—to seat up to 20 people.

On the walls are portraits of various Crasters, and one of Queen Caroline, wife of George II, and the fireplace, like that in the drawing-room, is deep and old-fashioned, with an iron basket.

The hall contains portraits of other Crasters, together with various banners of former members of the Family who held the post of High Sheriff. Incidentally, my late father—a very shy and retiring man—would not accept this ancient Office, so that, when I was appointed in 1944, I was the 7th instead of the 8th Craster to be High Sheriff of Northumberland! In addition to pictures of human beings, the hall also contains—over the door to the dining-room—a painting of a dead blackcock in full plumage, the last bird of this species to be shot by my paternal grandfather on Threestone Burn Moor, Roddam.

The staircase has been much admired over the years, the steps being wide and shallow, whilst the bannisters have only one newel-post, at the very bottom, although they continue right up to the second floor in one unbroken section.

The middle landing contains three single bedrooms, and one large double one, with the adjoining single room which is also available as a dressing-room should it be required, as there is a connecting door.

It is outside the door of the room at the south east corner that our very harmless ghost—"The Grey Lady"—is usually heard, making her 'rustling' way to the pele tower; and on this side of the house, also, that my younger brother, my late mother, and I on several occasions heard strange noises which remained quite unexplained! On this landing are more Sheriff's banners, and a "hammer-cloth," the ornamented covering which was hung on the box-seat of the coach in olden times. There are also some quite attractive pictures of both the Tower and its surroundings in bygone years.

Continuing up the staircase to the 3rd floor, there are here two rooms on the west side, which were—more years ago than I care to remember!—a large day nursery, and a smaller



Photo by Jill Flory

The Old Toll Bar on the Borderline at Bloody Bush.



Last relic of a vanished village: the Mercat Cross of Old Castleton in Liddesdale. See "History," Vol. XXXV, Part III, p. 275.

night nursery ; both now available, if re-furnished, as bedrooms ; together with a self-contained suite on the east side of double bedroom, dressing-room, and private bathroom ; this having been thus fitted up fairly recently.

Extensive attics run the whole length and breadth of the main part of the house, with another one—only approached from outside—below the pele roof.

In the old kitchen—which, most fortunately—we discontinued using as such just prior to the 1939-45 war, there is an interesting arrangement of cog-wheels and pulleys above where the oilomatic water-heater now stands ; and where, in my younger days, there was a big, old-fashioned “ eagle range.” These are the remaining components of a very old spit for the cooking of meat. I think it is fairly common knowledge that these aids to cooking were worked by a variety of processes, including both human agency, and small dogs ; but our particular model employed the draught in a very wide chimney ! A fan was installed here, connected by a clever succession of pulleys, cogs and belts—even having the refinement of oil-baths ! and the draught in the chimney was the agent responsible for turning the meat.

I need hardly add that the ceiling of this room also contains hooks from which—in olden times—many a home-cured ham awaited its treatment below !

I would like now to return my readers to the front library, and to come down to the more or less immediate past. This room contains various items of which I am most exceedingly proud ! There is an original Archibald Thorburn painting of a pair of ravens—the Craster Family crest, which I was fortunate to acquire through the great kindness of my friend, The Hon. Aylmer Tryon, of the Tryon Galleries, London. A specially commissioned Peter Scott oil painting of Greater Snow geese, pink-feet, and a grey lag ; and an original Eric Ennion of a cock pheasant in snowtime, given to me as a parting present when—much to the regret of Northumberland—he left the best county in England to go south !

Finally, on the principle of keeping the “ good wine ”—or probably it should be the “ best wine ”—to the end, I must

say something about two signed Royal photographs, and their story.

In the summer of 1958 my wife and I had the great honour and privilege of escorting Her Majesty the Queen round the Farne Islands, and in 1962 the process was repeated for Queen Elizabeth, the Queen Mother. On both occasions, and for this everyone was profoundly thankful, the weather could not have been better ; the birds behaved splendidly, as if they knew that they must be on their best behaviour ; and the Duchess of Northumberland wielded her camera in really professional style !

In consequence of these two unforgettable days, therefore, there stand in the front library various photographs ; two signed by Their Majesties, and another two taken by Her Majesty the Queen, and given to me as a memento of that historic occasion.

NOTE ON THE TOLL BAR MONUMENT AT BLOODY BUSH ON THE BORDER BETWEEN NORTHUMBERLAND and ROXBURGHSHIRE

By RUTH DONALDSON-HUDSON, B.A., F.R.Hist.S.

It had long been my ambition, ever since reading in W. J. Mack's *The Border Line* a description of this isolated monument, to get up to Bloody Bush and see for myself. Members may remember that at our Liddesdale meeting in 1961, I gave a short account of it (taken from Mack), as also of the origin of the name Bloody Bush, scene of a sanguinary encounter between English and Scottish Border raiders. (See *History*, Vol. XXXV, Part III, pp. 276-277).

Time and again, in the last two summers, the weather was against me, but at last on August 18th, 1963, the omens seemed moderately propitious and I set out with a companion for the North Tyne valley to explore that part of Kielder Forest, lying between Lewisburn and the Border. Three factors made the issue hang in the balance: Would the weather hold? Would the track, shown on the map as a very tenuous line, be passable to a car? Would I find the monument at the end of my trip? Fortune, however, favoured my voyage of discovery in all respects.

Just short of Lewisburn, about half a mile south of the hamlet, a Forestry road (signed "Forks Road") led off westward to The Forks, a small farm at the confluence of Lewis and Akenshaw Burns. Here we were well and truly on the old "Coal Road," along which, in pre-railroad days, pack-horses used to lead coals from the Plashetts and Lewisburn collieries over the fells to Liddesdale, thence to Hawick and Jedburgh. That coal is here very near the surface is evidenced by the frequent appearance of coal deposits in the soil wherever the burns have cut deeply into the hillsides.

About two miles beyond The Forks we passed a lone farmstead, Akenshaw (formerly Oakenshaw). It was here that the tolls had to be paid on pack-horses and other animals using the Coal Road. On the south side of the valley, opposite Akenshaw, is a hillock rejoicing in the name "Jamie and Andrew." Through binoculars I could see two large boulder masses which *might* represent burial cairns—perhaps those of two brothers.

Another mile along the track, which was roughly metalled and full of potholes but, thanks to the Forestry Commission, perfectly passable, brought us level with Willow Bog farm—as remote a habitation as you could find. After this the track became decidedly rougher, but we held on our course until it seemed wiser to halt the car and proceed on foot. By this time, however, we had espied the Toll Bar monument and we only had three-quarters of a mile to walk to reach it. I had realised my ambition!

The monument, of dressed stone, stands 15 feet high and is still in as sound condition as when it was first set up, dead on the line of the Border, about 1835 by Sir John Swinburne of Capheaton and William Oliver Rutherford of Dinlabyre, the two Marcher landlords who levied the tolls on the road—which they had presumably built between them. The inscription can still be read, giving a list of the tolls payable and also the distances from here to various villages and towns on either side of the Border. If the Forestry Commission's men have cleaned up the surface of the inscribed panel, as I rather think they may have done, more power to their elbows!

The Border Line here, at "The Bush," does not follow the skyline but runs about a mile east of the crest of Larriston Fells and some 350 feet lower than the summit.

The scenery was superb. Soon after we had reached our objective the clouds dispersed altogether and all was sunshine and blue skies. Below us stretched hundreds of acres, mile upon mile, of young trees set among the full-flowering heather. The solitude was complete except for our two selves, my dog, and the skylarks and other small birds.

On the way we crossed two old stone bridges, presumably

contemporaneous with the road. In the parapet of each bridge was set an inscribed stone with the legend: "Erected by Sir John Swinburne, Bart., of Capheaton, under the direction of James Wilson of Greena, 1828."

Another interesting landmark, seen from near Willow Bog, is what I took to be a stone circle, apparently quite a large one with a very tall standing stone at one end, on the summit of Elliot's Pike, some 1,560 feet high. On our way back we met a forestry worker by the roadside, and I questioned him about the stones. He knew the place well, but could only confirm that they formed a circle. As for "Jamie and Andrew," he had never heard of them. It was strange that the 1-inch Ordnance Survey Map, usually so careful to mark any ancient monument, gave no indication of a stone circle, or prehistoric fort, or tumulus on Elliot's Pike. The County History of Northumberland makes no mention of the place, nor of "Jamie and Andrew."

Enquiries from Miss K. S. Hodgson, F.S.A., of Brampton, elicited not so much information as considerable interest. She had long had reason to think that a stone circle was to be found somewhere in the Caplestone Fells (of which Elliot's Pike is a part), but had never located it. I drove her and Miss Murray up to Willow Bog so that they might scrutinise the supposed stone circle from afar, with the aid of binoculars. One thing immediately apparent to their trained eyes was that the tall "standing stone" was a man-made monument. At the opposite end of the "circle" was a large cairn, and the smaller stones numbered four, possibly five.

We next pursued our enquiries at the Forestry Camp in Lewisburn, and the men there confirmed that the tall stone was indeed an artificial monument, about 12 feet high. It further transpired that the smaller stones we had seen were built-up cairns, each about 6 feet high. The men generally seemed to think that the group of cairns, marked on their map as "curricks,"* had been used as a sheep-stell, and the fact that two adjoining farms marched on the ridge of Elliot's Pike rather supported this view: one could envisage the two

* *Currick* is the local (Cumbrian) word for a sheep-pen.

shepherds gathering all the sheep at this point in order to separate them into their respective flocks. One Jock Partridge (whom I could not meet, as he was out at work in the Forest), had, however, they told me, his own pet theory that Elliot's Pike would have been used in olden days by the mossstroopers as a look-out post and also, possibly, as a rallying point. The pre-historic bubble was burst but—if there was anything in Partridge's theory—the romantic element of Moss trooping had stepped in.

AN ADVENTUROUS RIDE— BATTLE OF SCLATERFORD— ILLICIT WHISKY TRADE

By RUTH DONALDSON-HUDSON, B.A., F.R.Hist.S.

About two and a half miles north-east of Bonchester Bridge the high road to Jedburgh crosses two bridges within a fairly short distance of each other. The first, and larger, is over the river Rule : it is of no very great interest except that on one occasion a man, riding a thoroughbred horse, galloped down to it at such a pace that the horse could not take the sharp bend at the beginning of the bridge and it leapt over the parapet. Horse and rider landed unhurt in the river, and to commemorate this remarkable escape the man cut his initials T. B. on the parapet of the bridge. (Unfortunately, I was not able to find them). For this information I am indebted to Col. A. T. Curle, Easter Weens, who also told me of the historic associations of the next bridge, which crosses a small burn.

Had we but known it, this bridge, over which we drove on our way from Bedrule Church to Bonchester Hill Fort on

August 8th, was the scene of a notable skirmish between Scots and English, in the same year as the Battle of Flodden. On the side of the bridge is a plaque with this inscription :

1513

“ And so went to the

SCLATERFORD

on the Water of Dowsett and there the Scots pursued us right sore, there bickered with us and gave us handstrokes.”

From Lord Dacre's despatch to King Henry VIII
13 November 1513.

To commemorate the above Skirmish this Tablet is erected by the Hawick Archaeological Society, 1905.

Close to the bridge (on the Jedburgh side) is a cottage formerly known as the “ Besom Inn.” The origin of the name lies in the fact that the place was a shebeen and whenever the excise officers were anywhere in the vicinity, the guid wife would leave her broom outside the door as a warning to would-be customers.

Mr. Ryle Elliot tells me there is still a Besom Inn in Coldstream, and no doubt it derived its name from the same circumstances.

ECCLESIASTICAL INTOLERANCE IN SEVENTEENTH CENTURY BERWICKSHIRE

Rev. JAMES BULLOCH, Ph.D.

Scotland, in other days, had abundant ecclesiastical disputes, and their memory has been sedulously maintained by the writing of heavily biased history. There is a widespread popular conviction that these disputes arose out of theological differences, but it would be more accurate to say that the relationship between church and state provided the main bone of contention. Similarly, there is a tradition that the Covenanters were apostles of liberty who suffered grievously at the hands of their oppressive opponents. Accurate comparisons are not always easy. Persecution can be disguised under other names in the records. Victimisation of the laity may be less completely recorded or ambiguous in character. Accounts of fines and imprisonments are not all equally preserved and available. Yet, one type of persecution is reasonably recorded in the deposition of ministers from their parishes, and offers a guide so long as the reader does not regard one example of deposition as tyranny and another as simple justice. Thus, it may be of some interest to chronicle and examine the specific examples of the expulsion of ministers from Berwickshire parishes in the controversial years of the seventeenth century. Wide variations occur between different counties, as will be seen if the following examination of the ministry in Berwickshire is compared with that of Covenanting districts such as Wigtonshire or Ayrshire.

In 1584, when the young James VI was endeavouring to extend his control over the clergy Patrick Gaittis, the minister of Duns, and the most prominent of the Berwickshire clergy, refused to sign obedience. His stipend was suspended for a time and he was brought to order. John Clapperton, of Coldstream and Simprim, was simultaneously in trouble, but

capitulated so readily that the stern Calderwood—who has much information about him—observed that “the man was ambitious and ready to embrace any preferment.”

This first instance of trouble had arisen over the first stage in the reconstitution of the Scottish Church under James VI. At the second, when the episcopate was reinstated, William Hog of Ayton, protested in 1606, but he suffered no serious penalty. Tobias Ramsay of Foulden, moderator of synod, and John Smith of Maxton, clerk of synod, were called before the council and threatened with imprisonment in Blackness Castle, but they, too, escaped. A third moment of dispute arose from the passing of the “Five Articles of Perth” in 1618. John Wemyss of Duns was called before the Court of High Commission for failure to observe the holy days of the Christian Year and to minister the elements to kneeling communicants. He replied that in this he acted in full agreement with all the ministers of the county. On his second appearance ten other ministers of the county appeared to support him. Though obliged to enforce, or to endeavour to enforce, the law of the church, the Archbishop had no inclination to deprive them. “I will continue you all till Easter,” he said, “And in the meantime, see ye give not the communion.” On Friday, 3rd March, 1620, John Wemyss and the moderators of the presbyteries of Duns, Chirnside, and Earlston, appeared again. The Archbishop appealed to them to set a law-abiding example and offered a very easy compromise, which they rejected. At last he ceased to urge them and concluded, “Seeing I can obtain nothing at your hand, grant me this one thing, that ye will be quiet and not hinder others who have promised, sworn, and subscribed.” By any standards, and doubly so by those found elsewhere in the seventeenth century, this was extreme tolerance. On the whole, it represents the general practice of the bishops of the first episcopate. Alexander Symson of Merton, when preaching in Edinburgh on 22nd July, 1621, flagrantly broke the spirit of the Archbishop’s request, by violently abusing both king and bishops in his sermon. The following day he was arrested, and until 2nd October, when he was released and confined to the bounds of his own parish, he was a prisoner in Dumbarton

Castle. These men had given considerable provocation by outspoken criticism of the government and the bishops but—by the standards of the age—they had been treated with great leniency. Under James VI and Charles I the Scottish Bishops and Council showed small desire to persecute.

It is with the coming of Covenanting times that the first signs of growing intolerance appear, though the tendency to blacken the names of ministers under a variety of abusive charges, which merely cover their opposition to the ruling party, was not so much in evidence in Berwickshire as elsewhere. John Makmath was one of the few who were open opponents of the Covenant from the start. He was therefore charged with deserting his parish, declining the authority of the Presbytery, and teaching Arminian doctrines and on 4th September, 1638, he was deposed. A new spirit is now in evidence. Makmath remained loyal to the king and the episcopate and survived until the Restoration in 1660, when he received a grant of £100 as some compensation for his sufferings. At Duns, Andrew Rollo, who had been brought up in the English Church, showed a similar outlook, but with less resolution. At the first he defied the Assembly, but when deposed on 14th December, 1638, he submitted, did public penance in his own church, and thus was restored. At Cockburnspath George Sydserf was deposed on 7th January, 1639, for "contempt of his Presbytery, tyrannical conduct in compelling his parishioners to conform to the Articles of Perth, and appealing to his Majesty." The appeal to his Majesty was in vain, for although the King interfered on his behalf, James Wright, a Covenanter, became minister of Cockburnspath in his place. These three were declared loyalists and episcopalians, but a more ambiguous case is that of Christopher Knoes—the name is an alternative form of Knox—who was deposed from Coldingham in 1641 on a charge of adultery. Examples found elsewhere suggest that his only sin may have been suspected opposition to the Covenant.

Throughout the next decade no cases can be traced until in 1648 Scotland's desperate venture on behalf of the losing cause of Charles I divided the nation. The Assembly, meeting in July, launched a bitter attack on "the Engagement" and

called on the people to withhold support. Despite this a Scots army was mustered to make a belated effort for the King, but at Preston all was lost before the onset of Cromwell's Ironsides; Covenanters from the west poured into Edinburgh and the Scots Parliament fled before them. Ministers who had disregarded the Assembly and supported the Engagement now had to pay the penalty.

Andrew Rollo of Duns got into trouble for the second time. He was deposed once again in July, 1649, and once again he capitulated, but this time with less result, since he was restored to the ministry on 13th October but not replaced in his parish. Other instances are more obscure. John Home of Eccles had been under discipline for some time before the Engagement, but it seems that he, James Methven of Fogo, and George Rowll of Longformacus had likewise been involved, since all three of them disappear from their parishes about this time. Patrick Smith of Chirnside, George Home of Ayton, William Home of Edrom, James Lundie of Hutton, and Henry Cockburn of Channelkirk shared the same fate. Cockburn survived until the Restoration and was replaced in his parish in 1662. James Home of Coldstream, Thomas Byres of Legerwood, and Thomas Courtney of Merton, were deposed in the following years. All three survived until the Restoration after which Byres and Courtney were restored to their former parishes, but Home was not, possibly because of age. Thus, as bitterness grew with the length of the Civil War, vindictiveness towards opponents increased.

However, the wheel was now to turn full circle, so that those who had victimised others were to know adversity themselves. In the first flush of the Covenant harsh treatment had been meted out to a few opponents such as John Makmath. Later, as the original Covenanting party split, deviationists—if a modern word may be permitted—were deposed by their rivals in their hour of opportunity. The section of extremists among the Covenanters, known as Protesters who, retained in power by English troops, had governed Scotland in the interests of Cromwell, had now long outstayed their welcome; Edinburgh celebrated the restoration of the monarchy with special sermons, barrels of wine in the High Street and—to the

indignation of Wodrow—a firework display on the Calton Hill in which Oliver Cromwell was seen pursued by the devil until both went up in flames.

But there were others who thought differently, and Berwickshire had a number of them. James Guthrie had been minister of Lauder from 1642 until November, 1650, when he was transferred to Stirling. He had been one of the Protesters from the start and had been a leader in the opposition to the Engagement. From that time onwards he was the most outstanding minister among the men who governed Scotland in the interests of Cromwell. While their English friends had preached tolerance, Guthrie and his Scottish associates had not practiced it and their bad example was now to be followed by their former victims, but with even more venom. Together with Argyll, Johnston of Warriston, and Samuel Rutherford, Guthrie was marked out for execution by the new regime. Rutherford anticipated trial by his death but first Argyll, and later Warriston, was executed. When the Committee of Estates met again a small group of Protesters was found in a nearby house drafting a document for the King's attention. Guthrie was among them ; he was arrested, and executed some months later.

A kindred spirit was James Kirkton, minister of Merton since 1657. For him the reign of Cromwell had been Scotland's golden age. "As the bands of the Scottish Church were strong," he wrote of those days, "So her beauty was bright ; no error was so much as named ; the people were not only sound in the faith, but innocently ignorant of unsound doctrine ; no scandalous person could live, no scandal could be concealed in all Scotland, so strict a correspondence was there between ministers and congregations. The General Assembly seemed to be the priest with Urim and Thummim, and there were not ane hundred persons in all Scotland to oppose their conclusions ; all submitted, all prayed, most part were really godly, or at least counterfeited themselves Jews. Then was Scotland a heap of wheat set about with lilies, uniform, or a palace of silver beautifully proportioned ; and this seems to me to have been Scotland's high noon." Others took a less lyrical view. Thus, when the Scots Parliament and the Privy Council

decided to deprive all clergy who refused to accept the restored episcopate, Kirkton was a marked man. By the Act of Parliament of 11th June, 1662, and the Act of the Privy Council of 1st October, 1662, he was deprived of his parish. Thereafter he was a consistent opponent of the Stewarts, at times in Scotland and at times in Holland, until the Restoration, when he made a brief return to his former Berwickshire parish. Kirkton had been a vindictive man and in return he was treated vindictively by his opponents, as in the description of his return to Merton given in "An Account of the late Establishment of the Presbyterian Government by the Parliament of Scotland, 1690."

"The famous Mr. J. Kirkton, one of the most noted Presbyterian preachers in the whole kingdom . . . This well known sound, man had entered by the thing called popular call, to the church of Merton, in the last times of Presbytery, and had been deprived with the rest, 1662. When King James gave his toleration Act, 1687, he was preferred to a meeting house in Edinburgh, where it seems he found better encouragement to meet with if he should return to his own country parish of Merton, and in this meeting house he continued till after this act of parliament was passed. Mr. Meldrum, the Episcopal minister at Merton, had complied with the civil government, and done all duty ; and so continued still in the exercise of his ministry there till towards the end of August, 1690, that is, ten or twelve weeks after Whitsunday ; and not till then it was that good Mr. Kirkton went to visit his poor country parish. But then he went indeed with energy suitable to his party ; for no sooner arrived he there, but presently he turned peremptory, demanded the benefit of the act of parliament, thrust Meldrum from the parsonage house and the church, preached two Sundays there, and secured thereby his title to the whole benefice from Whitsunday, 1689, and then returned to Edinburgh, where (as I hear) he has resided since, without minding his old flock at Merton. And who can blame him ? For everyone who knows them both knows that Edinburgh is a much better place. . . . In the meantime Merton continueth still vacant. Kirkton is wiser (as I have said) than to put it in the balance with Edinburgh . . . neither will they suffer

Meldrum the prelatist to return at any rate " These are not the words of a friend

Kirkton was far from being the only victim in 1662 At Eccles, John Jamieson, who had succeeded the displaced Samuel Douglas in 1654, was at once removed. Kirkton had testified that he was "of sound and faithful teaching, and godly life and conversation," so evidently he was of similar outlook, but he had not been of Kirkton's own party, for in 1655 they had attempted to supplant him by Andrew Rutherford. At Langton John Burne was a less outspoken opponent of the episcopate, so a blind eye was turned to him until his death in 1673. At Ayton, William Hume, though a Presbyterian, had also suffered from Kirkton's party. An act of parliament noted that he had been deprived of his stipend for two years and that this should now be paid to him. He conformed to episcopacy and received collation, and in this was typical of most of his brethren. At Coldingham, David Hume was deprived, and he became a wandering preacher. He lived to have a warrant issued for his arrest in 1674, and to take part in the battle of Bothwell Bridge in 1679, and died on 13th December, 1687, on the eve of the revolution. At Coldstream, William Johnstone, Guthrie's predecessor in Lauder, was deprived. Thomas Ramsay, of Mordington, a son of Ramsay of Foulden, was arrested with Guthrie but released, perhaps because of a friendly word spoken on his behalf, on the uncomplimentary grounds that he was mentally deranged. Despite refusal to conform to episcopacy, he was allowed to remain in his parish until the Test Act of 1681. Edward Jameson, of Swinton, another friend of Guthrie, was deposed in 1661, and became a preacher at Covenanting conventicles until the revolution, when he returned to Swinton for a year. Daniel Douglas, another Protester, was deprived of Hilton, which was later to be united with Whitsome, in 1662. At Nenthorn, James Fletcher was also deprived late in 1662, but he was one of those who later made their peace with authority. On 2nd September, 1669, he accepted the indulgence and, even though he was scarcely strict in observing its terms, he was allowed to hold the charge until his death in 1690. John Hardie of Gordon, similarly deprived in 1662,

also preached at conventicles but studied medicine and earned his living as a physician. In 1690 he was restored to his parish and remained its minister until his death on 29th November, 1707, one of the few survivors of early days who were known as antediluvians. Though he had suffered honourably in his day for rigid principles, he was remembered for his moderation and his friendship for those from whom he differed. William Calderwood, of Legerwood, a relation of the historian, was also deprived but like many others maintained a connection with his parish until he returned to it on 8th September, 1689. Like Hardy, of Gordon, he long ministered to it until his death on 19th June, 1709.

John Veitch, of Westruther, had an even more chequered career. Inducted in May, 1648, he was deprived in 1662. Taking advantage of an indulgence, he was restored to the parish, but in 1680 he was arrested and imprisoned in Edinburgh under stern conditions. Refusing to take the Test Act in the following year, he was deprived the second time. Having learned from experience, as he was leaving the manse he pointed out to his successor a well built peat stack and asked him to leave an equally good one when his turn for ejection came. This came about in 1690 when Veitch, who had suffered a further term of imprisonment, returned for the last time to Westruther to be its minister until his death on 16th December, 1692.

The next group of expulsions arose out of the Test Act of 1681. This incompetently drafted piece of tyrannical legislation imposed an oath on all holders of public office in church or state. While aimed against the Presbyterians of the left wing and intended to secure the untroubled accession of James VII and II to the throne, it was so inefficiently worded as to rouse violent objection from many Episcopalian loyalists. Six Berwickshire ministers were deprived under the act through refusal to sign. Two of them, the redoubtable John Veitch, of Westruther, as mentioned above, and Thomas Ramsay, of Mordington, were certainly Presbyterians. Robert Happer, of Langton, on the other hand, must have been an Episcopalian, for he was troubled with an indulged Presbyterian, Luke Ogle, who for a time ministered in his parish.

The outlook of David Stirling, of Cockburnspath, James Dunbar, of Abbey St. Bathans, and Patrick Sharp, of Foulden, is not known, but whether Presbyterian or Episcopalian they all suffered adversity together.

These troubles were now to come to a conclusion in the revolution of 1688. In previous troubles distinctions in the numbers of victims in the different presbyteries of the county are scarcely significant, but in this case it is worth making a comparison. Cockburnspath was in the Presbytery of Dunbar; its minister, John Barclay, was deprived on 8th September, 1689, and served thereafter as an Episcopalian in Perthshire and Edinburgh. Of the eleven ministers in the Presbytery of Duns six, William Gray, of Duns, Alexander Nicholson, of Bonkle and Preston, William Methven, of Fogo, John Home, of Greenlaw, John Cook, of Eccles, and Patrick Walker, of Langton, were immediately deprived for not praying for William and Mary. The ministers of Abbey St. Bathans, Cranshaws, Longformacus, Ellem, and Polwarth continued in their charges. A local distinction, rather than one of principle, may be responsible for this.

In the Presbytery of Chirnside the purge was even more sweeping and drastic, for only two of its fourteen ministers were left untroubled in their charges. Of these two, one had only a brief respite, for on 28th August, 1690, William Craufurd, of Ladykirk, was deposed on a charge of drunkenness. This should be considered sceptically, for elsewhere Episcopalians who could not be removed otherwise were frequently disposed of in such a fashion as this. Craufurd's drunkenness was said to have occurred fifteen or sixteen years previously, so it can scarcely have been habitual. More significant is the fact that he was alleged to have said that "the Covenant was no better than a band of rebellion." For reasons now concealed from us, Adam Waddel, of Whitsome, alone survived in the Presbytery.

Seven Berwickshire parishes were in the Presbytery of Lauder, and in each of the seven, with the exception of Channelkirk, the minister was expelled. Possibly the most interesting example is in the county's one charge in the

Presbytery of Kelso, Nenthorn. There the incumbent was Robert Calder, the Episcopalian equivalent of Kirkton, a man of equal gall and greater wit. He wrote with a pen dipped in vinegar, but with a touch of grim humour which will amply reward the reader of his "Scottish Presbyterian Eloquence Displayed," a collection of the more outrageous expressions ascribed to Presbyterian ministers, such as the prayer of Erskine, "Lord, have mercy upon all fools and idiots, and especially the magistrates of Edinburgh."

Thus in Berwickshire it was the year of the Covenant which saw the precedent set for the expulsion of recalcitrant ministers. Three were deprived; one was subsequently restored; and there is a possibility that a fourth should be classed along with them.

The second expulsion followed upon the disaster of the Engagement in a divided Church and a divided Scotland. This time twelve ministers were deposed.

The third expulsion is that following upon the Restoration, and this time ten ministers of the county lost their parishes. The Test Act of 1681 provides the fourth instance, with the expulsion of six ministers. Finally, in the course of the Revolution Settlement twenty-seven out of the thirty-four in the county were expelled.

"We never could be of the mind that violence was suited to the advancing of true religion," said the Lord High Commissioner to the Assembly of 1690 in the name of William and Mary, but possibly in the words of William Carstares, "nor do we intend that our authority shall ever be a tool to the irregular passions of any party. Moderation is what religion enjoins, neighbouring churches expect from, and we recommend to you." His words came too late to prevent the actions described above, and many other more violent ones in the troubled southwest of Scotland, but they expressed the outlook of the coming years.

Berwickshire in the seventeenth century held ministers representative of both extremes of opinion in that troubled century. No doubt the same, could we but know, would prove true of their congregations. But the great majority of

ministers showed no anxiety to leave their parishes because of doctrinaire adherence to either cause. In the beginning of the troubles the great majority of Berwickshire ministers appear to have had no sympathy with the innovations of James VI and Charles I, yet they were little troubled. It is plain that intolerance began with the Covenant and increased as the strife grew more bitter, that in Berwickshire, at any rate, the Covenanters were more guilty than their opponents of the expulsion of ministers who differed from them, and that by far the worst group of expulsions in the whole sad story took place in 1690 with the Episcopalians as the victims.

ABERDEEN MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE AUGUST/SEPTEMBER, 1963.

By Mrs. M. McWHIR

The 125th Meeting was held in Aberdeen. On the flower-bedecked platform of the Music Hall, the Inaugural Meeting took place.

The Duke of Edinburgh, resplendent in the red and blue academic robes as Chancellor of Edinburgh University and former President of the British Association, listened to Lord Provost, Professor John M. Graham, as he welcomed him to Aberdeen.

In an informal gesture the Professor thereafter presented the Duke with a copy of the geographical survey of the North East of Scotland, specially prepared by members of Aberdeen University, to mark the 1963 British Association Meeting to their town. As he did so, the Lord Provost remarked, the Duke had himself, as an exploring Gordonstoun school-boy of yesterday, and by his residences at Balmoral, met many of the challenges to skill made by the features of this region. This incident was a moment of informality in this glittering and resplendent gathering.

There was an audience of upwards of 2,000 many of them in evening dress or in colourful academic robes. Over 1,000 more members watched the proceedings on closed circuit television in the neighbouring Y.M.C.A. Hall.

Then Dr. E. M. Wright, Principal and Vice-Chancellor of the University, welcomed the Duke and the British Association to Aberdeen. Thereafter he conferred Honorary Degrees of L.L.D. on Sir George Allan, Secretary of the Association, who is retiring this year; and on Sir Charles Morris who retires

after 15 years as Vice-Chancellor of Leeds University ; also on Professor John M. Robertson Gardiner, Professor of Chemistry at Glasgow University and President of the Chemistry section of the British Association.

Lord Provost Graham then called on Sir Eric Ashley, this year's President, to give his inaugural address entitled "Investment in Man." Sir Eric paid tribute to the contributions of men from Aberdeen to the advancement of learning in Britain, the Commonwealth and the United States. "Science and scholarship," the President said, "had been greatly enriched by men who had taught or studied in Aberdeen ; *Physics* by Clark Maxwell, *Medicine* by Patrick Manson ; *Mathematics* by George Crystal ; *Biology* by Charles Mitchell." The President said, "There is no corner of the Commonwealth which has not been illuminated by the intellectual life of the City of Aberdeen." Sir Eric, continued, "This is the fourth occasion on which the City and University have acted hosts to the British Association and it is a great pleasure to begin as my distinguished predecessors in Aberdeen, by thanking the Lord Provost and the University and others for inviting us here and making such masterly arrangements for this meeting." Sir Eric then mentioned the Presidential Address by Lyon Playfair in 1885. He said, "We would be well served on this occasion if I were simply to read Playfair's speech to you—most of it is still as appropriate as when it was written and it is composed with a wit and eloquence rarely equalled in Presidential Addresses to this Association." The President went on, "It is my duty, however, to spin you something new," and continued, "he had a clear lead from last year's Presidential Address—Sir John Cockrofts "Investment in Science." To invest in Science you have first to *invest in man*. Alfred Marshall once wrote "The most valuable of all capital is that *invested in human beings*." Investment in man covers all kinds of education ; from primary schools to the training of research workers." The President said "You cannot isolate science—it is part of the seamless fabric of civilisation." Sir Eric then said, "Let us consider 'Investment in Man' at the level of higher education alone. Within these narrow limits I shall discuss three questions :—

- i. What are the sources of ability for this sector of Investment in Man ?
- ii. What policies and principles guide investment in these human resources ?
- iii. What is the state of our knowledge about the social institutions we use as instruments for this sector of investment ? ”

“ In 1962,” he said, “ 113,000 boys and girls in Britain completed a course of secondary education with sufficient success to qualify them for some form of full-time higher education. They represent only 14.5 per cent. of the age group and of these only about half meet requirements for entering a University.” Sir Eric asked, “ What has happened to the remainder ? Some 26,000 of them embarked on a grammar School course, but left before completing G.C.E. at the ordinary level or the Scottish Leaving Certificate, and some 474,000 of them left school before they reached the age of 16.”

In the course of his Address the President compared the American system of education, and illustrated two fundamentally different approaches to “ Investment in Man.”

The Americans have an open door to Higher Education. Anyone who has completed a High School Course may claim admission to some University or other.

The Degree Course is an obstacle race open to all competitors who care to enter it. The competitors can even choose whether to enter for difficult races with formidable obstacles, by going to Universities of more modest prestige. The President continued, “ The race is not always to the swift, the keen persistent tortoise provided he surmounts the obstacles, may find himself a prize-winner.”

Sir Eric went on—“ In Britain we follow an entirely different policy over Investment in Man. By the age of 12 the door is all but closed to 80 out of a hundred children to full-time higher education. The remaining 20 are selected for specialised privileged schooling which brings them to the gates of colleges and Universities but only about 8 out of 20 get in. We rigidly select a small group of young people and sponsor this

group through a heavily subsidised education of very high quality under very good conditions."

Sir Eric said, "There is now convincing evidence that thousands of children fall out of our educational system each year, due not to lack of ability but to lack of motive and incentive and opportunity. Whereas a child who succeeds in climbing the ladder of education has responded to a challenge; if there is no challenge there is no response."

The President concluded his most interesting address by remarking—"This is how we stand—we already spend large sums, even if they are inadequate, on Higher Education in Britain. It is probable that we shall be asked to spend a great deal more in a massive programme for "Investment in Man." Sir Eric said, "The task of Higher Education is (in the words of the President of the Carnegie Corporation) 'to provide a framework within which continual renewal and rebirth can occur.'"

He continued—"In the disturbing storm-swept feverish 37 years remaining to this century nothing less will suffice for "Investment in Man!"

At the Meeting of the General Committee on August 28th, 1963, Lord Brain was elected President of the Association. He will preside at the 126th Meeting to be held at Southampton in August/September, 1964. In 1950 Lord Brain became President of the Royal College of Physicians, and remained in this appointment for 7 years—a great tribute to his colleagues' respect for his eminence and reputation for integrity in the medical world.

This year's lectures were, as usual, most interesting and instructive. (Section X) representing the corresponding Societies of Britain, chose as its theme for the first two days that of Urban and Town Planning. This subject interested a number of the sections particularly section H. i.e., Archaeology, also the Geography Section.

In his Presidential Address to these combined Sections, Professor D. J. Robertson, of the Department of Social and Economic Research at the University of Glasgow, gave a very comprehensive and instructive view on the above subject.

Just about this time, in a Viking grave, at Westness, Ronsay, Orkney, Archaeologists found a Celtic brooch dated about 850 A.D. It may have been worn by a Viking lady as a cloak pin. It has been placed along with other objects found in the laboratories of the National Museum of Antiquities of Scotland in Edinburgh.

Two bronze swords have also been discovered, believed to date from about 750 B.C. ; also pieces of a bronze spear-head at Pyotdykes Farm, Muirhead, Angus. These relics have been placed in Dundee Museum.

Even in England, where every pebble in the fields has been picked up and inspected and replaced, archaeologists still have more to do than they can cope with. One such site is Basing House, about 50 miles from London. We are told it has everything ; a great place in history ; a marvellous situation, and a story of buried treasure. It was once the greatest private house in England. It belonged to the Marquis of Winchester, an Officer of State under Henry VIII, Edward VI, Mary and Elizabeth. When Civil War broke out in England, in 1642, Basing House became a fortress instead of a Palace. Inigo Jones, the greatest architect of his day, took refuge in the house. Oliver Cromwell besieged the place and after fierce fighting it capitulated. The Marquis of Winchester was found in a bread oven and was eventually allowed to go to France. We are told that Oliver Cromwell took away some quarter of a million pounds worth of treasure. Archaeologists are now searching with instruments normally used in prospecting for water—they tell clearly where there are buried walls and metals. They have already found fragments of gold and a ruby. It will take years to excavate the place. From the pottery and coins that have been found, it is clear that before the Norman Castle there was an Anglo-Saxon house here, and before that a series of Roman Villas. All the long life of this great house came to an end on that October day in 1645. This quiet and desolate place is still waiting to give up its secrets. We are told it is one of the strangest and least known places in England.

Continuing the account of the British Association lectures

at Aberdeen, Emeritus Professor J. A. Matthew was loudly applauded by one of the biggest audiences.

He declared, "We don't want to see our Scottish hill-lands, so beautiful, so attractive, so fascinating in so many ways, destroyed." He was immediately backed up by a distinguished Naturalist and expert on the Highlands, Dr. F. Frazer Darling, who said, "The integrated husbandry of agriculture and forestry in the uplands is going to take at least 200 years therefore," said he, "I feel we should strive for a land commission free from political pressure to supervise and overlook this very vital matter." Members of the following sections, i.e., Botany, Geography, Agriculture and Economics attended this meeting on the subject of land use in the Scottish Uplands. Lord Lovat remarked, "There had been too much piecemeal exploitation of the Highlands in the past and this subject was very close to the hearts of the people who lived there." He also said there were a great many Highland problems that remained to be solved.

Dr. A. A. Woodham, in Section H (Archaeology), told members in the course of a lecture, that recent work by field archaeologists only underlined the immensity of the task which lay ahead. Important sites were still being discovered and much could be done by the interested amateur in the way of recording and notifying prehistoric monuments observed in the field. Dr. Woodham is the Principal Scientific Officer heading the Field Technology of the Rowett Research Institute, Aberdeen. He has carried out archaeological field work, including a number of excavations in Rosshire and Inverness.

We were told by an Australian Agricultural expert, during this week of non-stop lectures, that water is the most important problem in the agricultural world and that this problem will as time goes on, become more acute.

Members of the British Association found the above statement hard to believe as we were favoured by only one dry day during this memorable week! He told us (Australian conditions) that to produce one loaf of bread required $2\frac{1}{2}$ tons of rain; one egg required 1 ton; 1 gallon of milk required 15 tons of rain.

The Professor is Dean of the Faculty of Agriculture at Sydney University. He is also Chairman of the New South Wales Freedom from Hunger Campaign, for which we are told he raised £4,000,000. He said, the solution of the world hunger problem would be the main contribution to the "Peace of the World."

The usual all-day excursion on the Saturday was through the most beautiful mountain country, but members deplored the fact that the heather-clad hills were all but invisible as they were indistinctly seen through a curtain of grey misty rain. The coach took us through the residential suburbs of Culter and Bieldside. Journeying on, we passed the Bridge of Dee, a late mediaeval bridge with a ridged archway still visible. The road we followed took us to Cairn-o-Mount and a vast panorama across the valley of Strathmore was spread before us, and lying to the east were the Sidlaws and to the South the Ochils. Clattering Bridge was left behind and on to Fettercairn. Here the road crosses the site of one of the ancient Royal Palaces of Scotland, 1200-1500. Then we passed Fasque, an estate associated with William Ewart Gladstone, the Liberal Prime Minister of the Victorian era. To the right, on leaving Fettercairn lies Ballegno Castle, a stronghold since dark age times and notable for the murder of Kenneth III and Fennella. On the left lies Witches Hill-ock, and as the name implies, the site of the burning of the witches of the Mearns. Then Edzell Castle was viewed in the passing—it dates from the 16th century. Then we came to Drumtochty which quite recently has been heavily forested. Then Auchanblae, this place has a history dating back to the 5th century when St. Palladius founded the first church in the Mearns. Then we passed Fordoun House, which is situated opposite a Roman Signal Station—part of the system, we were told, of Roman Camps and Signal Stations along the whole length of Strathmore. Following the main coast-road back to Aberdeen we passed many distilleries by the way. A most enjoyable outing marred to a great extent by the almost continual downpour.

During the week, a civic reception was held in the Beach Ballroom. 2,000 members sat down to a sumptuous repast,

and this was only the first sitting. A great marquee was erected for the occasion. The motto of Aberdeen is 'Bon Accord' which being translated means 'Happy to meet, sorry to part, happy to meet again,' and most truly did the Aberdonians live up to their motto. The grace and beauty of the Highland dancing will be long remembered by all who witnessed the remarkable agility of the performers enhanced on all occasions by the colourful tartan.

On the Sunday, preceded by the Town Sergeant, Sir Eric Ashley headed the procession to the West Church of St. Nicholas for the morning service. The Preacher was the Rev. Professor John Graham, Lord Provost of the city. In the course of his sermon he warned the scientists that unless guided wisely, the Advancement of Science could become to man 'the advancement of self-destruction.' He went on to say, "If a man makes a million and yet has no power to make friends and keep them, we know that in his essential business he has failed. If he has not peace and integrity of mind, he has become sounding brass and a tinkling cymbal."

These official services during this great yearly conference are unforgettable to all who have the privilege of attending, and taking part.

The Committee of the British Corresponding Societies met frequently during this busy week. The principal business of this committee is to consider matters of common interest to the Societies of the country. The Committee have one meeting each year which takes place at Birkbeck College, University of London; their business being to help prepare a programme for the next British Association Conference in 1964, held in Southampton. For two years I have attended this Committee Meeting as the Berwickshire Naturalists' representative.

One most interesting outing which must be included in this report was a visit to Ruberslaw Quarry. The stone obtained from the fearsome depth is the sparkling granite of which the City of Aberdeen is built. We were told it had been working for many centuries. Recently a company of Russian visitors were lowered to the bottom in the huge wooden box used by the quarry-men each day as they journey up and down. The quarry we were told is some 500 feet in depth. Many

famous buildings and monuments throughout the country have been built from the stones obtained from this great quarry.

At the conclusion of the Conference which has set new standards, the Officers and Council of the British Association recorded their profound appreciation of the hard work and characteristic Scottish hospitality that contributed so markedly to the success of this, the Association's fourth visit to the City of Aberdeen.

EXCAVATION OF A SHORT CIST WITH CREMATION AT MANDERSTON NEAR DUNS

By J. C. WALLACE

In March, 1963, during ploughing on the Manderston estate, near Duns, Berwickshire, a short cist was exposed. Mr. Mackenzie Robertson immediately reported the find to the Ministry of Works and Public Buildings who, in turn, reported it to the National Museum of Antiquities. On 9th April, 1963, the cist was excavated by Miss K. Tyson, Mr. H. A. Luke and Mr. J. C. Wallace, all of Edinburgh.

The site is on the farm of Manderston Mill, in the North Field, the National Grid reference being NT 81125555 (O.S. 6" sheet NT 85 NW). The terrain is a very slight ridge on rolling arable land sloping gently downwards from West to East. The soil is composed of sand and gravel.

THE CIST AND CAPSTONE (See Fig. I)

When unusually deep ploughing revealed the capstone, it was observed to be cracked. To allow excavation, the larger piece of the capstone was removed by mechanical means and, when the excavators arrived, the smaller piece could be seen in situ, with the outline of the cist and its filling.

The cist was oriented roughly West-East, wedge-shaped, with the narrower end to the West. The inside dimensions were 1 foot 3 inches wide at West end by 2 feet 7 inches wide at East end by 3 feet 4 inches long on the South side by 3 feet 3 inches long on the North side. The depths varied from 11 inches at the North to 12 inches at the South. The sides were of sandstone slabs ; that on the South being 3 feet 4½ inches long overall and tapering in thickness from 3 inches at the East to 6 inches at the West ; that on the North being 3 feet 2 inches long by 3½ inches thick ; the West being 1 foot 2½

inches long by $2\frac{1}{2}$ inches thick. The East side was in two parts ; the more southerly portion being 1 foot 8 inches long by $3\frac{1}{2}$ inches thick ; and the more northerly portion being 1 foot long by 2 inches thick ; this latter stone may have been broken, as its top was 4 inches below the underside of the capstone. The floor of the cist was formed of a single slab slightly smaller than the cist, being about 3 feet 2 inches long by 10 inches wide at West and 1 foot 10 inches wide at East. As the floor slab was not removed, the exact heights of the side slabs can not be determined, but they are likely to be about 2 inches greater than the inside depth of the cist. At the West end, eke stones were used to bring the sides up to the required height.

Without destroying the cist, it was not possible to measure the size of the hole into which it had been put, but the side slabs seemed to fit closely to the natural soil, except on the South side, where the hole extended to about 9 inches beyond the cist and was filled with large water-worn stones to support the side slab. Inside the cist on the South side, a pebble had been inserted to take up the space between the floor slab and the side slab.

The capstone was a sandstone slab 5 inches thick, originally roughly wedge-shaped, about 5 feet 3 inches long on its axis varying from about 2 feet 0 inches wide at the West to 3 feet 7 inches wide at the East. There were no signs of cupmarks nor other decorations.

THE CREMATION

The cist was entirely filled with dark soil and gravel mixed with cremated bone. Immediately under the capstone the soil was packed very hard. About 4 inches below the capstone there was a concentration of bone towards the North-East corner, near the gap in the East end slab. Below this hard layer the soil was slightly looser with less cremated bone. Nearing the floor of the cist, the soil was once again very hard packed, with a concentration of bone including part of the skull and the femur in a roughly central position. (See Fig. I—A and C). There seemed to be no disturbance from plant

roots, but there was the nest of a field mouse below the capstone in the South-East corner.

From the appended report on the remains, prepared by Drs. F. P. Lisowski and T. F. Spence, the cremation would appear to be of one individual, an adult male, suffering from osteo-arthritis and chronic malnutrition. Interesting points are that many of the bones had not been subjected to great heat, and that parts of the skull had bluish stains, probably from bronze, although no traces of bronze were found in the cist.

DISCUSSION

In 1882 a short cist was found about 500 yards to the West of Manderston House. (B.N.C. X, p. 304/5 and XXIV p. 184). This cist, which contained a beaker and skeletal remains, is probably unconnected with the present discovery.

Short cists containing only cremations are rarely encountered. There are instances of small stone receptacles which seem to have taken the place of cinerary urns : *e.g.*, at Redbrae, Wigtown, where the irregularly shaped cist measured from 20 inches to 15 inches long, by about a foot broad. (T.D.G.S. XXVI, p. 129/32 and XXVII, p. 208/9). Our present discovery is, however, a typical short cist, large enough to contain the usual crouched skeleton, and unnecessarily large and elaborate to contain only cremated remains. The nearest parallels, but without floor slabs, seem to be (1) a cist 4 feet long by 2 feet/2 feet 6 inches wide by 2 feet deep, discovered at Keltneyburn, Kenmore (D. and E. 1955) ; (2) a cist 4 feet long by 4 feet deep by 2 feet wide at Lintrathen, Angus (P.S.A.S. LXXIV, p. 135) ; (3) a cist 3 feet 4 inches long by 2 feet 1 inch wide by 1 foot 10 inches deep, one of a pair underneath a cairn at Hagg Wood, Foulden, and containing a food vessel (B.N.S. XXII, p. 282/294).

A list of Bronze Age Burials in Berwickshire, compiled in 1920, (B.N.S. XXIV 176-194), shows the diversity of burial practices in a confined area.

It is difficult to say whether or not the cist was deliberately filled. The dark soil, the compactness of the filling and the

distribution of cremated bone throughout, all might suggest a deliberate filling. On the other hand, if the gap in the North-East corner is original or of some antiquity, the probability is that the admixture of humus and bone has been occasioned by the activities of small animals and earth worms. The concentration of bone near the gap suggests a traffic route from the cist to the surface. Some chambered tombs were deliberately filled before final blocking ("The Chambered Tombs of Scotland—Vol. 1"—A. S. Henshall), but short cists seem normally to have had no deliberate filling before placing the capstone.

As to dating, one might hazard a guess to a transition period between short cists and cinerary urns, say 1500/1000 B.C. On the other hand, cremations are found in Neolithic times and seem to run parallel to inhumations at many stages in pre-history.

ACKNOWLEDGEMENTS

Thanks are due to the Manderston Estates Ltd. and to Mr. Mackenzie Robertson for reporting the discovery and authorising the excavation, at which hospitality and assistance were generously rendered. I am also greatly indebted to Drs. F. P. Lisowski and T. F. Spence, of the Department of Anatomy, University of Birmingham, for their report on the cremated remains. Major Dixon-Johnson of the Berwickshire Naturalists' Club rendered great assistance in taking photographs.

ABBREVIATIONS

- B.N.C. History of the Berwickshire Naturalists' Club.
T.D.G.S. Transactions of the Dumfriesshire & Galloway
Natural History and Antiquarian Society.
P.S.A.S. Proceedings of the Society of Antiquities of Scotland
D. & E. Discovery and Excavation, Scotland.

THE CREMATION FROM MANDERSTON, BERWICKSHIRE

By F. P. LISOWSKI and T. F. SPENCE,

Department of Anatomy, University of Birmingham.

The cremated remains came from a cist and were partly found immediately under the capstone and partly on the floor of the cist (Wallace, 1963). From an archaeological point of view these remains, owing to the sites from which they were retrieved, indicated the possibility of two separate cremations. The material was separated out into eight lots and forwarded for investigation by the usual methods (Lisowski, 1959).

Results

1. *Remains from upper hard layer, mainly North-East corner and throughout filling.*

The fragments are bluish grey and brittle, with enormous cracks and distortions.

Skull.—Many vault fragments with serrated sutural edges ; part of one left zygomatic bone showing latera' wall of orbit ; petrous part of right and left temporal bones ; a piece of the body of the sphenoid bone with sinuses ; part of optic foramen and surrounding bone ; mandibular fragment with genial tubercles ; : root of a canine tooth.

Vertebral column.—Several pieces of vertebral bodies and transverse processes.

Thorax.—Elements of ribs.

Upper limb.—Head of a radius.

Lower limb.—Two fragments of a femoral shaft.

Unidentifiable.—Several phalangeal, miscellaneous long bone and other unidentifiable fragments.

Pathology.—Evidence of osteoarthritis in the vertebrae.

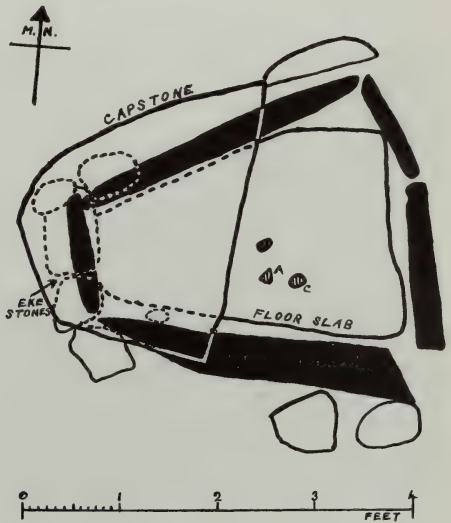
Number cremated.—One.

Sex.—? male.

Age.—Adult.



Short Cist at Manderston.



A and C Cremated bone on floor.

DIRLETON CASTLE



Photo R.D.H.

South Aspect, showing Great Drum Tower (13th Century)
and Entrance.



Photo R.D.H.

The Dovecote from the Battlements.

2. *Remains from hard gravel on floor.*

This material has not been subjected to much heat, few cracks are present and its colour is more brown than grey.

Skull.—Many vault fragments with serrated sutural edges ; a large maxillary piece shows clear tooth sockets ; a right mastoid process with mastoid air cells ; roots of several teeth are also present.

Vertebral column.—Four fragments of vertebral bodies.

Thorax.—Several large elements of ribs.

Upper limb.—A piece of the lower end of the humerus.

Lower limb.—A head and several shaft fragments of the femur ; part of a tibial shaft ; phalangeal fragments of the toes.

Unidentifiable.—Miscellaneous long bone and other unidentifiable fragments.

Pathology.—None.

Number cremated.—One.

Sex.—? male.

Age.—Adult.

3. *Piece A—floor.*

Upper end of left femur, very platymeric indicating the possibility of malnutrition. This fragment had not been subjected to great heat. The sex is probably male and the age corresponds to that of an adult.

4. *Pieces B—North-West corner, bottom layer.*

One fragment of the skull vault and one representing the head of the mandible ; part of a metacarpal bone ; six fragments of unidentified long bones.

5. *Piece C—floor.*

A large fragment of a parietal bone of the skull vault with serrated sutural edges ; this is stained bluish probably due to bronze.

6. *Piece from Section 1.*

Small skull vault fragment, stained bluish probably due to bronze. No evidence of excess heat.

7. *Remains from floor of South-West corner.*

Several skull fragments : one belongs to the vault and has serrated sutural edges and two are part of the left mastoid process and show large air cells.

8. *Remains from spoil outside cist.*

The Skull is represented by fragments of a zygomatic bone and a few pieces belonging to the vault. A few unidentifiable long bone and other unidentifiable fragments are present too. All the indications are that this material was not subjected to much heat.

Conclusions

It seems very probable that all eight lots are part of the same cremation and that therefore one is dealing here with an adult male individual who had definite signs of osteoarthritis and indications of chronic malnutrition.

References

- Lisowski, F. P.*—1959—‘The cremations from the Culdoich. Leys and Kinchyle sites.’ *Proc. Soc. Antiq. Scotland*, 89 : 83-90.
- Wallace, J. C.*—1963—Personal communication.

BERWICKSHIRE HETEROPTERA RECORDS, PAST AND PRESENT

By STUART McNEILL

(Communicated by A. G. Long).

The only published records for this group in Berwickshire that I have encountered are those of James Hardy in his papers, "On Insects of the East of Berwickshire taken in Autumn and Winter," (*H.B.N.C.* VI, 423) and "On Insects of East of Berwickshire No. II Captures 1873," (*H.B.N.C.* VII, 140).

In the following list composed of these records and those that I have collected since 1957, the nomenclature used is, as far as possible, that used in *Land and Water Bugs of the British Isles*, by T. R. E. Southwood and D. Leston (Warne, London, 1959). The name in brackets following this, is the name used by Hardy if this differs from that in use today.

The list includes 101 species but is by no means exhaustive.

I wish to acknowledge the invaluable help and encouragement received from A. G. Long, M.Sc., F.R.S.E., who first stimulated my interest in this group of insects.

Section GEOCORISAE

Family ACANTHOSOMIDAE

1. *Elasmotethus interstinctus* (Linn.) (*Acanthosoma pictum*).
From Pease Dean, Blackcraig and Akieside in November, 1873 (J. Hardy) (*H.B.N.C.* VII, 140); Gordon Moss, last instar larva, 25.8.1961 (S. McNeill).
2. *Elasmucha grisea* (Linn.) (*Acanthosoma griseum*).
Pease Dean, Black Craig in November, 1873, (J.H.) (*H.B.N.C.* VII, 140).

Family PENTATOMIDAE

3. *Dolycoris baccarum* (Linn.) (*Pentatoma baccarum*).
St. Helens Church, near Grantshouse, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).
4. *Pentatoma rufipes* (Linn.) (*Tropicotis rufipes*).
Dunglass Dean, 1873, (J.H.) (*H.B.N.C.* VII, 140);
Paxton, 4.9.1958; 24.8.1960, (S.McN.); Gavinton and
Duns, September, 1961 (A. G. Long).
5. *Piezodorus lituratus* (Fab.).
Common on furze, 1873, (J.H.) (*H.B.N.C.* VII, 140).
6. *Zicrona caerulea* (Linn.).
Larva on bramble near Ayton, 14.8.1961, (I. Patterson).

Family LYGAEIDAE

7. *Nysius thymi* (Wolff).
Windendean, August, 1873, (J.H.) (*H.B.N.C.* VII, 140).
8. *Kleidocerys resedae* (Panz.) (*Ischnorhynchus resedae*).
Pease Bridge, 1872, (J.H.) (*H.B.N.C.* VI, 423).
9. *Peritrechus lundi* (Gmelin) (*Peritrechus luniger*).
No locality given, 1872, (J.H.) (*H.B.N.C.* VI, 423).
10. *Stygnocoris pedestris* (Fall.) (*Stygnocoris sabulosus*).
Sea coast, 1872, (J.H.) (*H.B.N.C.* VI, 423).
11. *Stygnocoris fuliginus* (Geoff.) (*Stygnocoris arenarius*)
Sea-coast, 1872, (J.H.) (*H.B.N.C.* VI, 423).
12. *Drymus sylvaticus* (Fab.).
No locality given, 1872, (J.H.) (*H.B.N.C.* VI, 423); East
Reston Mill, 28.11.1959, (A.G.L.).
13. *Scolopostethus affinis* (Schill.) (*Scolopostethus adjunctus*).
Old Cambus, 1872, (J.H.) (*H.B.N.C.* VI, 423); Paxton,
17.8.1958; 11.6.1960, (S.McN.).
14. *Scolopostethus thomsoni* (Reut.).
Paxton, 24.9.1962, (S.McN.).
15. *Scolopostethus decoratus* (Hahn.) (*Scolopostethus affinis*).
Old Cambus, 1872, (J.H.) (*H.B.N.C.* VI, 423); Paxton,
15.5.1960, (S.McN.).
16. *Taphropeltus contractus* (Herr-Schaeff.) (*Scolopostethus contractus*).
Old Cambus, 1872, (J.H.) (*H.B.N.C.* VI, 423).

17. *Gastrodes abietum* (Berg.).
Spruce cones, Gavinton, 16.3.1959, (A.G.L.).
18. *Gastrodes grossipes* (De Geer).
Spruce cones, Gavinton, 16.3.1959, (A.G.L.).

Family TINGIDAE

19. *Tingis cardui* (Linn.).
No locality given, 1872, (J.H.) (*H.B.N.C.* VI, 423).

Family NABIDAE

20. *Nabis flavomarginatus* (Scholtz).
Paxton, 25.8.1958 ; Ayton, 9.9.1960, (S.McN.).
21. *Nabis ferus* (Linn.).
No locality given, 1872, (J.H.) (*H.B.N.C.* VI, 423) ;
Gavinton Glen, 21.9.1958, (S.McN.).
22. *Nabis rugosus* (Linn.).
Ayton, 9.9.1960 ; Paxton, 20.9.1961 ; 24.9.1962, (S.McN.).
23. *Dolichonabis limbatus* (Dahlbom) (*Nabis limbatus*).
Old Cambus, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).

Family CIMICIDAE

24. *Temnostethus pusillus* (Herr.-Schaeff.).
Lichen on dead hawthorn, Paxton, 25.8.1958, (S.McN.).
25. *Elatophilus nigricornis* (Zett.).
Ayton, 10.9.1961, (S.McN.).
26. *Anthocoris confusus* (Reut.).
Paxton, 23.11.1958 ; 20.9.1961, (S.McN.).
27. *Anthocoris nemoralis* (Fab.) (*Anthocoris austriacus*).
Dean, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140) ;
Oak, Paxton, 15.8.1958, (S.McN.).
28. *Anthocoris gallarum-ulmi* (De Geer).
Elm, Paxton, 25.8.1958 ; 20.9.1961, (S.McN.).
29. *Anthocoris nemorum* (Linn.).
No locality given, 1872, (J.H.) (*H.B.N.C.* VII, 140) ;
Paxton, 7.8.1957 ; 5.9.1958, etc., very common (S.McN.).
30. *Tetraphleps bicuspid* (Herr.-Schaeff.).
Spruce, Paxton, 25.9.1958 ; 20.9.1961, (S.McN.).

31. ? (*Temnostethus nemoralis*).
From fir trees in November, Tower Dean, 1873, (J.H.) (*H.B.N.C.* VII, 140). Am unable to trace this at all, could be an *Acompocoris* species as this genus is included in *Temnostethus* in Douglass and Scott (1865) and the given host plant agrees, it is not *A. nemoralis* as this only occurs on deciduous trees.

Family MIRIDAE

32. *Monalocoris filicis* (Linn.).
Pease Dean, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; ferns, Paxton, 25.8.1958, etc., common, (S.McN.).
33. *Bryocoris pterydis* (Fall.).
Ferns, Paxton, 25.8.1958, etc., common, (S.McN.).
34. *Deraeocoris scutellaris* (Fab.) (*Capsus scutellaris*).
Penmanshiel, Old Cambus, August, 1873, (J.H.) (*H.B.N.C.* VII, 140).
35. *Phylus pallipes* (Fieb.).
Oak, Paxton, 6.7.1958, (S.McN.).
36. *Phylus melanocephalus* (Linn.).
Numerous on oak, Penmanshiel, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; oak, Paxton, 6.7.1958, (S.McN.).
37. *Phylus coryli* (Linn.).
Black var., Tower Dean, 1873, (J.H.) (*H.B.N.C.*) VII, 140).
38. *Psallus ambiguus* (Fall.) (*Apocreminus ambiguus*).
Plentiful on birch, Penmanshiel, July, 1873, (J.H.) (*H.B.N.C.* VII, 140).
39. *Psallus betuleti* (Fall.) (*Apocreminus obscurus*).
On hazel, Penmanshiel, July, 1873, (J.H.) (*H.B.N.C.* VII, 140).
40. *Psallus roseus* (Fab.).
Gordon Moss, 28.8.1961, (S.McN.).
41. *Psallus lepidus* (Fieb.).
Oaks and sloe, Old Cambus, July, 1873, (J.H.) (*H.B.N.C.* VII, 140).
42. *Psallus alnicola* (D. and S.).
Paxton, 4.9.1961, (S.McN.).

43. *Psallus varians* (Herr-Schaeff.).
Oaks, Penmanshiel Wood, July, 1873, (J.H.) (*H.B.N.C.* VII, 140).
44. *Plagiognathus arburstorum* (Fab.).
Common, 1873, (J.H.) (*H.B.N.C.* VII, 140).
45. *Plagiognathus chrysanthemi* (Wolff) (*Plagiognathus viridulus*).
Pease Dean, Old Cambus, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).
46. *Dicyphus epiboli* (Reuter).
Nabdean, 7.9.1961, (S.McN.).
47. *Dicyphus stachydis* (Reuter).
Paxton, 15.5.1960, (S.McN.).
48. *Dicyphus pallidicornis* (Mey.-Dür.) (*Idolocoris pallidicornis*).
Foxglove leaves (brachypterous specimen), 1872, (J.H.) (*H.B.N.C.* VI, 423).
49. *Dicyphus constrictus* (Bohe.) (*Idolocoris pallidus*).
Penmanshiel, August, 1873, (J.H.) (*H.B.N.C.* VII, 140).
50. *Dicyphus annulatus* (Wolff) (*Idolocoris annulatus*).
Rest-harrow at coast, 1872, (J.H.) (*H.B.N.C.* VI, 423).
51. *Dicyphus globulifer* (Fall.) (*Idolocoris globulifer*).
Sea-coast, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140).
52. *Strongylocoris leucocephalus* (Linn.) (*Stiphrosoma leucocephala*).
2 from Winden Dean and 2 from bog, Old Cambus, rare, 1873, (J.H.) (*H.B.N.C.* VII, 140).
53. *Malacocoris chlorizans* (Panz.).
Pease Dean and Penmanshiel Wood, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; hazel, Paxton, 4.9.1961, (S.McN.).
54. *Cyllocoris histrionicus* (Linn.).
On oaks, numerous in Penmanshiel Wood, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).
55. *Heterocordylus tibialis* (Hahn.).
Dean, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140).
56. *Blepharidopterus angulatus* (Fall.) (*Aetorhinus angulatus*).
Penmanshiel Wood, Pease and Tower Deans, 1873,

- (J.H.) (*H.B.N.C.* VII, 140).; Nabdean, 30.8.1960 ; 4.9.1961 ; Mire Loch, St. Abbs, 10.9.1960, (S.McN.).
57. *Orthotylus viridinervis* (Kirsch.) (*Litosoma viridinervis*).
Pease Dean, 1873, (J.H.) (*H.B.N.C.* VII, 140).
58. *Orthotylus nassatus* (Fab.) (*Litosoma nassatus*).
Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140).
59. *Cytorhinus caricis* (Fall) (*Sphyracephalus elegantulus*).
Bog, sea-banks, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140).
60. *Mecomma ambulans* (Fall) (*Sphyracephalus ambulans*).
Pease Dean, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).
61. *Pithanus maerkeli* (Herr-Schaeff).
Among grass, common, 1873, (J.H.) (*H.B.N.C.* VII, 140).
62. *Lygus pratensis* (Linn.).
Paxton, 7.8.1958 ; 15.5.1960 ; 21.4.1958, etc., common, (S.McN.).
63. *Lygus rugulipennis* (Popp.).
Paxton, 7.10.1957 ; 7.9.1958 ; 26.8.1961 ; Gordon Moss, 28.8.1961, (S.McN.).
64. *Lygus wagneri* (Rem).
Paxton, 20.9.1961 ; Gordon Moss, 28.8.1961, (S.McN.).
(Hardy records a *L. campestris* but this is uncertain as the species in this and in *Orthops* have only been differentiated correctly in this country in the last few years).
65. *Liocoris tripustulatus* (Fab.).
Pease Bridge, on nettles, 1872, (J.H.) (*H.B.N.C.* VI, 423 ; Paxton, 30.8.1960 ; 29.8.1958, etc., common (S.McN.).
66. *Orthops rubicatus* (Fab.).
Gavinton Glen, 21.9.1958, (S.McN.).
67. *Orthops cervicinus* (Herr-Schaeff)
Beat from hazel and ash, Pease Dean, November, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; Paxton, 5.9.1958, (S.McN.).
68. *Orthops campestris* (Linn.).
Paxton, 5.9.1957, 15.8.1958, etc., common, (S.McN.).
(Hardy records an *O. pastinaceae* which may be this species).

69. *Orthops kalmi* (Linn.).
Penmanshiel, sea-coast and dean, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140 ; Paxton, 15.8.1958, (S.McN.).
70. *Lygocoris pabulinus* (Linn.).
Paxton, 15.8.1958, etc., Nabdean, 28.8.1960, 4.9.1961, etc., common, (S.McN.).
71. *Lygocoris contaminus* (Fall).
Paxton, 4.9.1961 ; Nabdean, 28.8.1960 ; 7.9.1961 ; Mireloch, St. Abbs, 9.9.1960, (S.McN.).
72. *Lygocoris spinolae* (Mey.-Dür) (*Lygus spinolae*).
2 Penmanshiel Wood, 1873, (J.H.) (*H.B.N.C.* VII, 140).
73. *Charagachilus gyllenhali* (Fall).
Dean, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140).
74. *Miris striatus* (Linn.).
Nabdean, 4.9.1961 ; 7.9.1961, (S. McN.).
75. *Calocoris quadripunctatus* (Vill.) (*Deraeocoris striatellus*).
Penmanshiel Wood, on oak, 1873 (J.H.) (*H.B.N.C.* VII, 140).
76. *Calocoris sexgutatus* (Fab.) (*Deraeocoris sexgutatus*).
Penmanshiel Wood, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140) ; Paxton, 10.7.1958, 15.8.1958, etc., common, (S.McN.).
77. *Calocoris roseomaculatus* (De Geer) (*Deracocoris ferrugatus*).
Penmanshiel Wood, etc., 1873, (J.H.) (*H.B.N.C.* VII, 140).
78. *Calocoris norvegicus* (Gmelin) (*Deraeocoris bipunctatus*).
Penmanshiel Wood and Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; Paxton, 10.7.1958, 7.9.1958, etc., common, (S.McN.).
79. *Adelphocoris lineolatus* (De Geer) (*Deraeocoris fornicatus*).
One from oak, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140) ; Paxton, 15.8.1858, 25.8.1958, etc., common, (S.McN.).
80. *Phytocoris tiliae* (Fab.).
On oak, Penmanshiel, Pease Bridge, Towerdean, August-September, 1873, (J.H.) (*H.B.N.C.* VII, 140).
81. *Phytocoris longipennis* (Flor.).
Gavinton Glen, 31.9.1958 ; Paxton, 4.9.1961, (S.McN.).

82. *Capsus ater* (Linn.) (*Raphalatomus ater*).
Dean, Old Cambus, 1873, (J.H.) (*H.B.N.C.* VII, 140);
Paxton, 7.8.1958, (S.McN.).
83. *Stenodema calcaratum* (Fall) (*Miris calcaratus*).
Among grass, common, 1873, (J.H.) (*H.B.N.C.* VII,
140); Paxton, 17.8.1958, 15.5.1960, 4.9.1961, etc.,
common, (S.McN.).
84. *Stenodema laevigatum* (Linn.).
Paxton, 18.5.1958, 5.8.1958, 15.5.1960, etc., common,
(S.McN.).
85. *Stenodema holsatum* (Fab) (*Miris holsatus*).
Among grass, common, 1873, (J.H.) (*H.B.N.C.* VII,
140); Paxton, 14.6.1958, 23.11.1958, 15.5.1960, etc.,
common, (S.McN.).
86. *Trigonotylus ruficornis* (Geoff.) (*Miris ruficornis*).
Among grass, common, 1873, (J.H.) (*H.B.N.C.* VII,
140); Paxton, 17.8.1958.
87. *Tetracoris saundersi* (D. & S.).
Near Pease Bridge, rare, 1873, (J.H.) (*H.B.N.C.* VII,
140).
88. *Leptopterna dolobrata* (Linn.) (*Lophomorphus dolobratus*).
Among grass and on moors, 1873, (J.H.) (*H.B.N.C.*
VII, 140).

Family SALDIDAE

89. *Salda littoralis* (Linn.).
Pool at sea-side, foot of Pease Burn, July, 1873, (J.H.)
H.B.N.C. VII, 140).
90. *Saldula saltatoria* (Linn.) (*Salda saltatoria*).
Common, 1873, (J.H.) (*H.B.N.C.* VII, 140); Sunwick,
21.4.1960, (S.McN.).

Section AMPHIBICORISAE

Family VELIIDAE

91. *Velia caprai* (Tamin.).
Paxton, 15.8.1958, etc., common, (S.McN.).

Family GERRIDAE

92. *Gerris thoracicus* (Schumm.).
Edrington, 12.7.1957, (S.McN.).
93. *Gerris gibbifer* (Schumm.).
Edrington, 12.7.1957 ; St. Abbs, 9.9.1960, etc., common,
(S.McN.).

Section HYDROCORISAE

Family NEPIDAE

94. *Nepa cinerea* (Linn.).
Immature specimen, foot of Horndean Burn, 1960,
(A.G.L.).

Family APHELOCHEIRIDAE

95. *Aphelocheirus aestivalis* (Westw.).
Near Twizel Bridge, (19?) (Dr. H. D. Slack).

Family NOTONECTIDAE

96. *Notonecta glauca* (Linn.).
Sunwick, 22.4.1960, (S.McN.).

Family CORIXIDAE

97. *Callicorixa praeusta* (Fieb.).
Sunwick, 22.4.1960, (S.McN.).
98. *Corixa punctata* (Ill.).
Ayton, 10.9.1960, (S.McN.).
99. *Sigara dorsalis* (Leach).
Clarabad, 6.3.1960, (S.McN.).
100. *Sigara lateralis* (Leach).
Paxton, 7.9.1957, (S.McN.).
101. *Sigara nigrolineata* (Fieb.).
Ayton, 10.9.1960, (S.McN.).

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part VII.

By A. G. LONG, M.Sc., F.R.E.S.

Family CARADRINIDAE (cont.)

207. *Cerastis rubricosa* Fabr. Red Chestnut. 445.
- 1873 Preston, at sallows (J. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
- 1875 Ayton, at sallows (S. Buglass, *ibid.* p. 483).
- 1902 Lauderdale, beaten from sallows—not common (A. Kelly in *Lauder and Lauderdale*, p. 307).
- 1927 Well distributed, but not very common, recorded at Fans by R. Renton (G. Bolam, *H.B.N.C.* Vol. XXVI, p. 175).
- 1952 Gordon, several at sallows, April 26 (E. C. Pelham-Clinton). Kyles Hill road, a pair *in cop* on sallows April 18, others on sallows at Polwarth, April 19 (A.G.L.).
- 1954 Gordon, several at light, April 28 (E. C. Pelham-Clinton)
- 1955 Kyles Hill, Retreat, Gordon Moss, April 6-May 7, several at light (A.G.L. and E. C. Pelham-Clinton).
- 1956 Gordon Moss, Polwarth, Hirsell, Kyles Hill, several (A.G.L. and E. C. Pelham-Clinton).
- 1957 Gavinton, two in m.v. trap, April 23.
- 1960 Gavinton, one May 8 (A.G.L.) also one at Birgham (Grace A. Elliot).
- 1961 Gavinton, one in m.v. trap, May 11.

Summary.—Widely distributed, a regular visitor to sallow catkins and m.v. light in April and early May but never very abundant. Some specimens have a light grey suffusion over the fore-wings.

208. *Panolis flammea* Schiff. (*piniperda* Panz.).

Pine Beauty. 446.

- 1875 Ayton, twenty in one night; willow blossoms, fir woods, (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Edgarhope, beaten from willow bloom (A. Kelly, *Lauder and Lauderdale* p. 307).
 1927 Well distributed, not uncommon where pine woods prevail. Recorded from Pease Dean and Earlston (G. Bolam *H.B.N.C.*, Vol. XXVI, p. 173).
 1952 Kyles Hill, three at willows, April 12 and 18.
 1955 Kyles Hill, one emerged on March 15 from a pupa dug under a Scots Pine.
 1956 Oxendean, April 8; Legerwood, one brought by a pupa April 17; Hirsell, May 7 and 8—a few at m.v. light.

Summary.—Widely distributed through the county wherever there are Scots Pines, it comes freely to willows and m.v. light in April and early May.

209. *Orthosia gothica* Linn. Hebrew Character. 447.

- 1874 Preston, swarms at willows (J. Anderson, *H.B.N.C.*, Vol. VII, p. 231).
 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Lauderdale, willows, very common (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1914 St. Abbs Lighthouse (W. Evans, *Scot. Nat.*, 1914, p. 279).
 1927 Abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 173).
 1952 Gavinton, Gordon Moss, April 4-May 20 (A.G.L. and E. C. Pelham-Clinton).
 1953 Gavinton, Gordon Moss, March 1-May 22 (A.G.L. and E. C. Pelham-Clinton).
 1954 Gavinton, Gordon Moss, March 15-May 16 (A.G.L. and E. C. Pelham-Clinton).
 1955 Gavinton, Gordon Moss, Kyles Hill, Bell Wood, Retreat, April 3-June 11 (A.G.L. and E. C. Pelham-Clinton).

- 1956 Gavinton, Gordon Moss, Hirsell, Paxton, April 2-June 14 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton, Gordon Moss, March 26-May 31 (A.G.L. and E. C. Pelham-Clinton).
 1960 Gavinton, May 2-25.
 1961 Gavinton, May 11.

Summary.—A very abundant visitor to sallow bloom and m.v. light. It usually starts emerging in March and continues on the wing through April and May and sometimes into June.

210. *Orthosia cruda* Schiff. Small Quaker. 499.

- 1874 Lauderdale ; at willows (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
 1875 Ayton, three at sallows, seems rare (S. Buglass, *ibid.*, p. 483).
 1902 Lauderdale, rare (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Taken all over the district but seldom in any great numbers. Records from Eyemouth (scarce), Pease Dean, and Fans. (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 173).
 1952 Kyles Hill, one at sallows, April 18.
 1955 Retreat, five at light April 5 ; Aiky Wood near White Gate, one emerged from pupa April 8 ; Oxendean Pond, five at m.v. light on April 9 and May 9.
 1956 Oxendean, Hirsell, Gordon Moss, several April 8-May 2.
 1957 Edrom House, one at kitchen window February 5, a very early date (W. M. Logan-Home).

Summary.—Fairly common and widespread wherever there are oak-woods. It usually emerges about the first week in April and continues on the wing into May coming to light and sallow bloom.

211. *Orthosia stabilis* View. Common Quaker. 450.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Lauder, abundant (A. Kelly, *Lauder and Lauderdale* p. 307).
 1911 St. Abbs Lighthouse, April 23 (W. Evans, *Scot. Nat.* 1914, p. 280).
 1927 Abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 173).
 1952 Gordon Moss, Polwarth, Langton, Duns Castle, Kaysmuir, Bonkyl Wood, Cumledge Mill, Kyles Hill, March 24-April 28 (A.G.L. and E. C. Pelham-Clinton).
 1953 Gavinton, Gordon Moss, March 9-May 22 (A.G.L. and E. C. Pelham-Clinton).
 1954 Gavinton, Gordon Moss, April 12-May 9 (A.G.L. and E. C. Pelham-Clinton).
 1955 Gavinton, Gordon Moss, Kyles Hill, Oxendean, Retreat March 26-May 23 (A.G.L. and E. C. Pelham-Clinton).
 1956 Gavinton, Gordon Moss, Hirsell, April 8-May 22 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton, March 22-May 10.
 1960 Paxton, Gavinton, March 30-May 9 (A.G.L. and S. McNeill).

Summary.—An abundant and widespread species the larvae feeding on oak, hazel and other deciduous trees. The moths are on the wing from late March and throughout April and well into May. They come to sallows, treacle and light. The pupae can be dug up in winter under oak trees.

212. *Orthosia incerta* Hufn. Clouded Drab. 452.

- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
 1902 Lauderdale, sallows, common, East Waters (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Abundant (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 174).
 1951 Gordon Moss, one at light June 21 (E. C. Pelham-Clinton).
 1952 Gavinton, April 8-28.

- 1953 Gavinton, Gordon Moss, March 8-April 28 (A.G.L. and E. C. Pelham-Clinton).
 1954 Gavinton, Gordon Moss, March 22-May 9 (A.G.L. and E. C. Pelham-Clinton).
 1955 Gavinton, Gordon Moss, Kyles Hill, Oxendean, March 15-May 24 (A.G.L. and E. C. Pelham-Clinton).
 1956 Kyles Hill, Gordon Moss, Oxendean, Hirsell, March 25-June 1 (A.G.L. and E. C. Pelham-Clinton).
 1957 Gavinton, March 22-April 23.
 1960 Gavinton, May 3-22.

Summary.—Widespread, common, and extremely variable. The imagines start emerging in March and continue on the wing through April and May and even into June of some seasons. Very fine light coloured and mottled forms occur in woodland localities like Oxendean. The species comes well to light and tallows. I have reared the larva from birch.

*213. *Orthosia munda* Esp. Twin-spot Quaker. 453.

- 1902 Lauderdale. Feeds on oak at the side of East Waters (A. Kelly, *Lauder and Lauderdale* p. 307).
 1927 Lauderdale, taken by A. Kelly (G. Bolam *H.B.N.C.*, Vol. XXVI, p. 174).

Summary.—Kelly's record for Lauderdale still stands as the only one for the county. Robson had only one record for Northumberland and Durham and had never met with the insect himself. Baron de Worms states that it is "found among oak in almost every county up to the south of Scotland" (London Naturalist, 1955, p. 49). If still present it must be very local and rare in Berwickshire.

214. *Orthosia advena* Schiff. Northern Drab. 454.

- 1883 Gordon Moss, taken by R. Renton (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 174).
 1889 White Hall, taken by Bolam (*ibid.*)
 1952 Gordon Moss, a few at tallows, April 26 (E. C. Pelham-Clinton).

- 1953 Gordon Moss, April 12 (E. C. Pelham-Clinton).
 1954 Gordon Moss, two at light, April 28 (E. C. Pelham-Clinton).
 1955 Gordon Moss, three at m.v. light, April 13 (A.G.L.).
 1956 Gordon Moss, over twenty at light April 12, 21, 28 and May 2 (A.G.L. and E. C. Pelham-Clinton).

Summary.—Distinctly local but well established at Gordon Moss. It flies from about mid-April to early May and comes to light and sallow bloom. The larva feeds on sallows so that one would expect it to occur in other parts of the county.

215. *Orthosia gracilis* Fabr. Powdered Quaker. 455.

- 1843 Near Pease Bridge, by J. Hardy (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).
 1927 Very local, no other county record apart from above (G. Bolam *H.B.N.C.*, Vol. XXVI, p. 174).
 1952 Gordon Moss, several at sallows April 26 (E. C. Pelham-Clinton).
 1954 Gordon Moss, a few at light, April 28 (E. C. Pelham-Clinton).
 1956 Gordon Moss, several, April 28-May 14 (E. C. Pelham-Clinton and A.G.L.) ; Hirsel, four at light, May 5-19 (A.G.L.).
 1961 Birgham House a few at light April 17 and 20 (Grace A. Elliot).

Summary.—Somewhat local favouring damp places where Sallows and Meadow Sweet abound. It emerges later than the other *Orthosias* flying from the last week of April until late May.

216. *Atethmia xerampelina* Hübn.

Centre-Barred Sallow. 456.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Whitadder near Cockburn Law by T. Stevenson (J. Ferguson, *H.B.N.C.*, Vol. VII, p. 284).

- 1875 Broomhouse, flying round a stunted ash overhanging Whitadder (A. Anderson, *H.B.N.C.*, Vol. VII, p. 481).
 1876 Eyemouth, one worn specimen at sugar (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
 1876 Ayton Woods, three at sugar (S. Buglass, *ibid.*, p. 128).
 1902 Lauderdale, found in garden, rare so far but widely distributed (A. Kelly in *Lauder and Lauderdale*, p. 308).
 1927 Not common but well distributed; Edrington Castle 1903 (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 183).
 1952 Gavinton, two at street lamps, August 30.
 1953 Gavinton, thirteen at lamps, August 19-September 16.
 1954 Duns, two, October 2.
 1955 Gavinton, fifteen at m.v. light, August 14-28; Oxendean Pond, several, August 27.
 1956 Polwarth, one on ash trunk September 23 (E. C. Pelham-Clinton); Gavinton, one September 8.
 1959 Gavinton, August 21; Birgham House, August 26 and 29 (Grace A. Elliot).
 1960 Gavinton, August 20-28; Birgham House, August 18 (G.A.E.).

Summary.—Not uncommon and widely distributed. The larvae feed on ash trees and the imago rests on the trunk after emerging. It flies from mid-August to mid-September or even October in late seasons.

217. *Omphaloscelis lunosa* Haw. Lunar Underwing. 457.

- 1879 Ayton Woods (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1902 Lauderdale, comes to sugar but scarce (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Widely distributed, sometimes fairly plentiful but as a rule scarce. Buglass got two at Ayton, Shaw took one at Eyemouth and Kelly took it at Lauder (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 181).
 1955 Gavinton, four at m.v. trap, September 20-23.
 1956 Old Cambus Quarry, one at m.v. light, September 1; Hirsell Loch, three at light after midnight, September 7.

- 1958 Birgham House, a few, September 9 (Grace A. Elliot).
 1959 Birgham House, September, 9, 10 and 13 (G.A.E.)
 1960 Birgham House, August 29 and September 7 (G.A.E.).
 1961 Birgham House, September 13 and 23 (G.A.E.);
 Gavinton, one September 9.

Summary.—Widely distributed but apparently most common in the Tweed valley. It usually begins to emerge in early September and continues through the month coming to light and sugar. Both yellow and grey forms occur.

218. *Parastichtis suspecta* Hübn. Suspected. 458.

- 1876 Ayton woods, a few at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
 1880 Lauder, very rare (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
 1902 Lauderdale, not common (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Rare, but widely distributed. Buglass and Shaw got it sparingly at Ayton and Eyemouth (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 179).
 1952 Gordon Moss, several at thistle flowers and sugar, August 10 (E. C. Pelham-Clinton); Kyles Hill, one on a beech trunk by day, August 13.
 1954 Greenlaw Road above Polwarth, three at sugar on telegraph poles, September 1 and 5.
 1955 Gordon Moss, five at m.v. light, August 2 and 9; Kyles Hill, one at light, August 13.
 1956 Gordon Moss, several fresh specimens at m.v. light, August 10; Kyles Hill, one (worn) at light, September 8.

Summary.—Local, but widely distributed, occurs where tallows abound. It flies from about the first week in August to the first week in September, coming to light and sugar.

219. *Agrochola lota* Clerck. Red-line Quaker. 459.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1875 Preston, two or three at sugar (J. Anderson, *ibid.*, p. 481).
 1902 Edgarhopewood, on *Salix caprea* (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Well distributed, somewhat local, far from uncommon in certain seasons. Records from Duns and Lauder. (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 182).
 1952 Gavinton, one at street lamp, October 16.
 1954 Langton Ford, one at sugar, September 21 ; Gavinton, one at light, October 2.
 1955 Gordon Moss, September 23 ; Oxendean Pond, October 7.
 1956 Gordon Moss, three at light, September 22 (E. C. Pelham-Clinton) ; Grantshouse, one at treacle, October 20.
 1959 Gavinton, October 11 ; Birgham House, September 13 (Grace A. Elliot).
 1960 Birgham House, one September 16 (G.A.E.).
 1961 Birgham House, one emerged on September 18 from a larva found on a willow in the garden on May 31 ; also one at m.v. light, September 23 (G.A.E.) ; Gavinton, one October 5.

Summary.—Widely distributed but never abundant. It emerges about mid-September and continues on the wing until about mid-October. Larvae occur on willows in May and June.

220. *Agrochola macilenta* Hübn. Yellow-line Quaker. 460.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1875 Preston, very common at sugar (J. Anderson, *ibid.*, p. 481).
 1902 Lauderdale ; comes to sugar and ivy in Autumn. Very rare here. (A. Kelly, *Lauder and Lauderdale*, p. 307).

- 1927 Well distributed, not so common as *lota*. Records from Duns, Lauder, Ayton, Foulden (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 182).
- 1952 Langton Mill Ford, two at sugar, September 17; Polwarth, one September 28.
- 1954 Langton Ford, White Gate, Retreat, common at sugar September 14-October 8.
- 1955 Elba, one, September 18; Oxendean Pond, October 7; Gavinton, October 9; several at m.v. light.
- 1956 Gordon Moss, fifteen at light, September 22 (E. C. Pelham-Clinton); Gavinton, Aiky Wood near White Gate, Grantshouse, several at treacle and light, October 8-20.
- 1957 Gavinton, October 9.
- 1960 Gavinton, October 7.

Summary.—Unlike Bolam I have found this species to be more common than *lota* especially in the vicinity of oak woods. It flies from mid-September to late October and comes well to sugar and light. Two colour forms occur one pale yellow the other reddish.

221. *Agrochola circellaris* Hufn. Brick. 461.

- 1902 Lauderdale. The most common of this genus (A. Kelly, *Lauder and Lauderdale*, p. 308).
- 1911-13 St. Abbs Lighthouse, one, October 29, 1911; seven, September, 25, 1913; four, September 27, 1913 (W. Evans, *Scot. Nat.*, 1914, p. 281).
- 1927 Generally distributed and common (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 181).
- 1952 Dowlaw, Gavinton, Nesbit, Polwarth, Duns Castle, abundant, August 30-November 2 (A.G.L. and E. C. Pelham-Clinton).
- 1953 Gavinton, September 7.
- 1954 Gavinton, Kyles Hill, abundant, September 11-November 4.
- 1955 Gordon Moss, Nesbit, Oxendean Pond, Kyles Hill, August 26-October 11.

- 1956 Gordon Moss, Duns, Hirsell, Gavinton, Aiky Wood, Grantshouse, Cuddy Wood, abundant at treacle and light, September 12-November 17 (A.G.L. and E. C. Pelham-Clinton).
 1959 Birgham House, September 10 (Grace A. Elliot); Gavinton, October 2.
 1960 Gavinton, September 21-27; Milne Graden, October 8.
 1961 Gavinton, September 18-October 4.

Summary.—Widely distributed and generally common though its numbers fluctuate. It usually starts to emerge about the end of August and can be found as late as November. Abundant at treacle and light wherever there are elm trees, the larvae feed on the elm fruits in spring.

*222. *Agrochola lychnidis* Schiff. Beaded Chestnut. 462.

- 1927 One taken at Foulden Hag in 1906. Robert Renton thought he had taken it at Fans (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 181).

Summary.—We have no further records of this species which although plentiful in most parts of England is scarce and local in Scotland. Robson had records for the southern part of Northumberland but thought that it reached the northern limit of its range in that region. The moths visit sugar and light in September and October. This is a species which may well occur in the Tweed valley.

223. *Anchoscelis helvola* Linn. Flounced Chestnut. 463.

- 1873 Preston, about oaks (J. Anderson, *H.B.N.C.*, Vol. VII, p. 122).
 1874 Hoardweil, rather common but not easily netted—twisting through dwarf oaks (A. Anderson, *ibid.*, p. 232).
 1874 Aiky Wood near Hoardweil, four specimens (A. Kelly, *ibid.*, p. 233). See also *Scot. Nat.*, 1875-6, p. 9 where Kelly records it as common.

- 1876 Ayton woods, at sugar (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).
1880 Aiky Wood and Abbey St. Bathans (A. Kelly, *H.B.N.C.*, Vol. IX, p. 385).
1902 Lauderdale, rare (A. Kelly, *Lauder and Lauderdale*, p. 307).
1927 Scarce, but widely distributed. Recorded for Duns (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 180).
1955 Retreat, one at sugar, September 3.

Summary.—Apparently somewhat local and scarce though widely recorded. It is a species of oak woods especially on higher ground and comes well to sugar in September.

ORNITHOLOGY

Observations during 1963 by A. G. LONG, D. G. LONG and
Lieut-Col. W. M. LOGAN HOME.

Crossbill. One seen at Gavinton, January 10, and two at Kyles Hill, August 21 (D.G.L.).

A High School pupil (D. Virtue) reported seeing a Sparrow Hawk kill a Crossbill in some Scots Pines at Fawside, near Gordon, on February 9. On seeing the boy the hawk dropped its prey. The Crossbill was brought to school and was an adult female with a dull greenish-yellow rump very like a Greenfinch (A.G.L.).

Collared Dove. A pair were present in Duns for a number of months in summer and autumn. One was seen at Chalkielaw on June 14 (D.G.L.).

Buzzard. One was seen at Hule Moss on March 16 (D.G.L.).

Grasshopper Warbler. A single bird frequented young trees on the right bank of the Whitadder between Preston Bridge and Paradise, May 15-June 30. Another was reported lower down the Whitadder near Broomhouse. On July 19 one was seen at Coldingham Bay and another on July 28 was present at Woodheads (D.G.L.).

Whooper Swans. On Saturday morning February 16 while walking along Newtown Street, Duns, I saw 27 Whooper Swans flying north in V-formation. The weather was very cold and snow was falling (A.G.L.). Ten were seen at Kelso on December 22 (D.G.L.).

Osprey. A single bird was seen several times over the Tweed in the Birgham-Fireburnmill area during early June (W.M.L.H.).

Stonechat. A male and two juveniles were seen at Pease Bay on October 2 (W.M.L.H.).

Black Headed Gull. A bird was observed, on June 9, catching small fish at the side of a swift current of water in the Tweed below Coldstream Bridge. Some of the fish were eaten, others were left on a flat rock. When the latter were

examined they were found to be Three-Spined Sticklebacks (W.M.L.-H., A.G.L.).

House Martin. A dead bird was found, on July 15, below Blackadder Bridge at Allanton. It bore a ring numbered AB83450. The bird ringing secretary at the British Museum informed me that the bird had been ringed as a nestling at Beal in Northumberland on 21.7.62 (A.G.L.).

Black Necked Grebe. One was at Hule Moss between August 11 and September 21 (D.G.L.).

Green Sandpiper. At Hule Moss, one August 11, two August 12, three August 14, one August 21-25. One at Gavinton on August 27 (D.G.L.).

Shelduck. One at Hule Moss, October 26 (D.G.L.).

Dunlin. Ten at Hule Moss, August 14 (A.G.L. and D.G.L.).

Winter's Toll. At Pease Bay on March 24 the following dead birds were found along the shore line, 1 Great Crested Grebe, 1 Fulmer, 1 Common Scoter, 1 Eider, 2 Lapwings, 1 Curlew, 7 Redshanks, 1 Tern, 10 Gulls, 3 Razorbills, 44 Guillemots (1 Northern), 1 Puffin, 2 Fieldfares (D.G.L.).

ENTOMOLOGY

Observations during 1963 by A. G. LONG,

Perizoma bifaciata. Barred Rivulet. One taken in m.v. trap at Gavinton, July 31.

Gnophos obscurata. Annulet. One taken on rocky scaur on right bank of Whitadder above Hutton Castle Mill on August 2.

Celaena leucostigma. Crescent. One taken in m.v. trap at Gavinton, August 25.

Cucullia chamomillae. Chamomile Shark. Two larvae were given to me by C. B. Williams, F.R.S., and Arthur Smith of Selkirk. They were found on flowers of Scentless Mayweed at Burnmouth on July 21. Later another was obtained at the same locality by E. C. Pelham-Clinton of the Royal Scottish Museum.

BOTANY

Observations during 1963 by D. G. LONG and A. G. LONG.

- Valeriana pyrenaica*. Giant Valerian. Naturalised at side of burn below the Cuddy's Gaol near Bonkyl Lodge, June 6.
- Medicago arabica*. Spotted Medick. Between Fireburn Mill and Birgham on N. bank of Tweed, June 9.
- Hesperis matronalis*. Dame's Violet. Between Fireburn Mill and Birgham on N. bank of Tweed, June 9.
- Ornithogalum umbellatum*. Star of Bethlehem. Between Fireburn Mill and Birgham on N. bank of Tweed, June 9.
- Pyrola minor*. Lesser Wintergreen. Top of Cuddy Wood, Lees Cleugh, June 13.
- Koeleria cristata*. Crested Hair Grass. Dowlaw Dean, June 15.
- Helictotrichum pratense*. Meadow Oat. Dowlaw Dean, June 15.
- Vicia sylvatica*. Wood Vetch. Scaur above Hutton Castle Mill on Whitadder right bank, August 2.
- Melica uniflora*. Wood Melick. Near junction of Well Cleugh and Lees Cleugh Burns, June 17.
- Rubus saxatilis*. Stone Bramble. Near junction of Well Cleugh and Lees Cleugh Burns, June 17.

CORRECTIONS

Re article on "Place-Names in the Border Country"
(Vol. XXXVI,i).

- Page 45. For Hackthorpe (cumberland) read Hackthorpe (Westmorland).
- „ 45. For Heythorp read Heythrop.
- „ 46. (Footnote) For "huff" read "he-uff."
- „ 49. For Whitadder read Whiteadder.
- „ 49. For Audr read Adur.
- „ 50. For Welsh read Gaelic and *vice-versa*.
- „ 52. For Logan Hume read Logan-Home.

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1963

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.		Bright Sunshine.			
	Maximum.	Minimum.	Hrs.	Days with Sun.	Hrs.	Days with Sun.
			Days with Temperature at or below 32°.			
			Lauder.	26	28	28
			Cowdenknowes.	31	28	17
			Swinton House.	25	27	8
			Manderston.	29	28	11
			Duns Castle.	26	28	3
			Marchmont.	24	26	7
			Whitchester.	28	28	8
			Lauder.	1	2	6
			Cowdenknowes.	3	0	0
			Swinton House.	3	2	7
			Manderston.	8	4	8
			Duns Castle.	14	13	16
			Marchmont.	11	14	19
			Whitchester.	13	12	16
			Lauder.	42	41	51
			Cowdenknowes.	38	41	50
			Swinton House.	40	42	55
			Manderston.	48	45	57
			Duns Castle.	54	38	52
			Marchmont.	42	42	63
			Whitchester.	41	42	63
January	-	-	18	46.0	19	25
February	-	-	17	69.0	17	23
March	-	-	25	93.1	80	26
April	-	-	23	120.6	103	23
May	-	-	26	148.0	150	26
June	-	-	23	122.7	128	23
July	-	-	27	120.3	101	23
August	-	-	21	86.3	72	21
September	-	-	25	154.9	143	25
October	-	-	26	95.5	85	26
November	-	-	10	31.4	23	12
December	-	-	15	32.2	26	13
Year	-	-	261	1120	991	251

RAINFALL IN BERWICKSHIRE DURING 1963.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Height above sea-level -	St. Abb's Head.	Tweed Hill.	Whitchester.	Duns Castle.	Manderston.	Kimmerghame	Swinton House	Lochton.	Marchmont.	Cowdenknowes.	Lauder.	Dura- tion.*
		245'	50'	838'	500'	353'	300'	200'	150'	498'	300'	600'	Hours
<i>Month</i>													
January	-	1.05	3.10	4.29	2.92	3.65	2.75	2.79	2.65	2.94	3.08	2.75	74.5
February	-	1.31	1.75	3.23	1.22	1.85	1.50	1.47	.88	1.85	2.41	2.87	34.5
March	-	1.51	1.13	2.57	1.71	1.68	1.60	1.31	1.12	1.97	2.42	2.94	28.6
April	-	1.29	1.91	2.60	2.11	2.17	1.95	2.04	1.94	2.28	2.77	2.80	40.7
May	-	1.53	1.56	1.78	1.85	2.06	1.95	1.95	2.10	2.14	2.09	1.89	35.8
June	-	2.13	2.88	4.48	2.90	2.88	3.32	2.59	2.78	3.29	2.73	4.03	60.9
July	-	1.48	1.74	1.97	1.44	1.30	1.07	1.50	2.11	2.22	2.01	1.54	38.3
August	-	5.19	7.00	6.23	7.83	7.98	7.18	6.88	7.12	7.18	5.22	5.62	85.4
September	-	2.62	3.14	4.15	3.51	3.67	3.40	3.42	3.17	3.51	3.43	3.52	41.1
October	-	1.15	1.67	1.93	1.45	1.44	1.21	1.61	1.56	1.93	2.06	2.06	35.1
November	-	4.63	6.06	7.48	6.58	6.38	6.90	5.74	6.42	6.46	6.46	6.63	100.7
December	-	.19	1.10	1.31	.91	1.15	.97	.92	.98	.93	1.13	1.32	22.4
Year	-	24.08	33.04	42.02	34.43	36.21	33.80	32.22	32.83	36.70	35.81	37.97	598.0

* Number of hours for which rain fell at a rate of .004 inches or more.

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1963.

INCOME

<i>Credit Balance at September 20th 1962</i>	...	£26	5	11
<i>Subscriptions—</i>				
Annual	...	£408	15	0
Junior	...	2	15	0
Entrance Fees	...	28	0	0
Arrears	...	28	15	0
				468 5 0
<i>Sale of Club Badges</i>	...	14	17	0

EXPENDITURE

History for 1962 (Martins)	...	...	...	£275	0	0
<i>Printing and Stationery—</i>						
Printing Notices (Martins)	...	...	£59	13	7	
Stationery (Martins)	...	...	6	11	8	66 5 3
<i>Sundry Expenses—</i>						
Kings Arms Hire of Room	...	...	1	1	0	
Insurance Premium	...	...	2	2	0	
Bank Charges	...	...	12		6	
Reid & Sons Badges	...	...	34	13	0	
Rent of Books in Library	...	...	1	0	0	39 8 6
<i>Subscriptions—</i>						
Assoc. Preservation Rural Scotland	...	...	1	1	0	
Chillingham Wild Cattle	...	...	1	1	0	
British Association	...	...	3	3	0	
S.R.G. British Archaeology	...	...	3	0	0	8 5 0
<i>Expenses—</i>						
Secretary	...	...	30	0	0	
Treasurer	...	...	6	9	7	
Delegate to British Association	...	...	17	0	0	53 9 7
Credit Balance at Bank, September 20th 1963	...	...	...	...	...	66 19 7
						£509 7 11

BALANCE SHEET.

LIABILITIES			ASSETS		
Carried from General Account	...	...	£66 19 7	Cash in Bank	...
Investment Account	...	...	...	National Commercial Bank	...
Balance at 20/9/62	...	£200 17 5	...	Trustee Savings Bank	...
Interest added	...	5 0 0	205 17 5		...
			<u>£272 17 0</u>		<u>£66 19 7</u>
					<u>205 17 5</u>
					<u>£272 17 0</u>

FLODDEN FIELD MEMORIAL FUND.

Balance at 20/9/62	...	£50 18 9			
Interest added	...	1 7 1	52 5 10	Cash in Bank	...
			<u>£52 5 10</u>		<u>£52 5 10</u>

Berwick-on-Tweed, 8th October, 1963. Audited and found correct.

(Signed) P. G. GEGGIE, Hon. Auditor.

C. J. DIXON-JOHNSON.



THE BERWICKSHIRE NATURALISTS' CLUB RULES AND REGULATIONS.

(Founded September 2nd, 1831.)

BADGE: WOOD SORREL.

MOTTO: " MARE ET TELLUS, ET, QUOD TEGIT OMNIA, CÆLUM. ' ,

1. The name of the Club is The Berwickshire Naturalists' Club (1831).
2. The object of the Club is to investigate the natural history and antiquities of Berwickshire and its vicinage (1831).
3. All interested in these objects are eligible for membership (1831).
4. The Club consists of (a) Ordinary Members, (b) Junior Members, (c) Contributing Libraries and Societies, (d) Corresponding Members, eminent men of science whom the Club desires to honour (1883), (e) Honorary Lady Members, (f) Associate Members, non-paying members who work along with the Club (1883), and (g) a limited number of Life Members.
5. New members are elected at any meeting of the Club by the unanimous vote of members present, the official forms having been duly completed, and the nominations having been approved by the officials of the Club. New members are entitled to the privileges of membership upon payment of the entrance and membership fees (1922), concerning which they will be duly notified (1937). If elected in September such member is eligible to attend the Annual Meeting for the year, no

fees being due before 1st January (1937). The names of new members who have not taken up membership within six months of election, and after having received three notices, will be removed from the list (1925). The Club rules and list of members at date are sent on election (1937).

6. The entrance fee is 20s. (1937), and the annual subscription 25s. (1954). These are both due on election. Subsequent subscriptions are due after the annual business meeting, and entitle members to attend the meetings and to receive a copy of the Club's *History* for the ensuing year (1925). No fees or subscriptions should be sent until requested by the Treasurer (1937).
7. The number of Ordinary Members is limited to 400. The names of candidates are brought forward in priority of application, power being reserved to the President to nominate independently in special cases, irrespective of the number of members on the Roll (1884).
8. The *History* of the Club is issued only to members who have paid their year's subscription. Names of members who are in arrears for two years will be removed from the list after due notice has been given to them (1886).
9. The Club shall hold no property (1831), except literature (1906).
10. The Office-Bearers of the Club are a President, who is appointed annually by the retiring President ; a Vice-President (1932), an Organising Secretary, an Editing Secretary, two Treasurers (1931), and a Librarian, who are elected at the annual business meeting (1925), and who shall form the Council of the Club (1931) ; with in addition one lady and one gentleman co-opted by the Council as members of the Council and one member (lady or gentleman) co-opted by the Council specially to deal with Natural History subjects (1948) as member of the Council, to serve for the ensuing year ; they will retire at the Annual Meeting, but being eligible can offer themselves for re-election (1937).

11. Expenses incurred by the Office-Bearers are refunded. The Secretary's expenses, both in organising and attending the meetings of the Club, may be defrayed out of the funds (1909).
12. Five monthly meetings are held from May till September (1831). The annual business meeting is held in October. Extra meetings for special purposes may be arranged (1925).
13. Notices of meetings are issued to members at least eight days in advance (1831).
14. Members may bring guests to the meetings, but the notices of meeting are not transferable (1925). Guests may only attend when accompanied by members (1937).
15. At Field Meetings members should hand to the Secretary a card or slip with his or her name and the number of guests (no names) (1925 ; revived 1952).
16. At Field Meetings no paper or other refuse may be left on the ground. All gates passed through must be left closed (1925). No dogs are allowed (1932).
17. Members omitting to book seats for meals or drives beforehand must wait till those having done so are accommodated (1925).
18. Contributors of papers to the *History* receive five extra copies.
19. The Secretary must be notified of any suggested change in Rules not later than the 1st of September in each year, all members having not less than ten days' notice of such (1937).

" RULE FIRST AND LAST."

" Every member must bring with him good humour, good behaviour, and a good wish to oblige. This rule cannot be broken by any member without the unanimous consent of the Club "—(1849)—" Correspondence of Dr George Johnston," p. 414 (Founder and first President of the Club).

THE LIBRARY

A complete set of the Club's *History*, publications of kindred Societies, and other local and scientific literature, are now housed in a large bookcase in the Public Library, Marygate, Berwick-upon-Tweed. (See Notice on the case.) Parts of the Club's *History* are in charge of the Club Librarian, T. D. Gray, Esq., 41 Ravensdowne, Berwick-upon-Tweed, and may be obtained "only on loan" by application to him. Parts are also on sale to Members or Non-members at the following prices. Extra copies (above three) are, to Members, 3s. 6d. per part up to 1920; to Non-members, 6s. (1906). From 1921 to 1933, to Members, 6s.; to Non-members, 10s. (1921). From 1934 to 1947, to Members, 5s.; to Non-members, 7s. 6d. From 1948 until further notice, to Members, 7s. 6d.; to Non-members, 20s. (1921). Centenary Volume and Index, 10s. (1932). (When only one copy of year is in stock, it is not for sale.—F. M. Norman, Secy., 20/8/1906). Future prices to be adjusted by the Council from time to time in accordance with cost (1934).

THE PINK SLIP.

B.N.C., 1939.

1. Members are reminded that under Rule 15 no dogs are allowed at meetings.
2. Care should be taken that no paper or other refuse be left on the ground, and that wickets and gates be closed.
3. Smokers are requested to see that matches and cigarette ends are extinguished before throwing away, especially in woods.
4. During talks, members are asked to form a wide circle round the speaker, to enable everyone to hear.
5. When the attention of members is desired, the Secretary will sound the Horn.
6. The President's car (or car selected by the Secretary in his absence) will carry the Club Flag, and members are asked not to pass or get in front of this car, unless they are leaving the meeting.
7. Dr. Johnston's "Rule First and Last" —
"Every member must bring with him good humour, good behaviour, and a good wish to oblige."

THE BERWICKSHIRE NATURALISTS' CLUB

LIST OF MEMBERS, 31st July, 1964.

Those marked with an Asterisk are Ex-Presidents.

LIFE MEMBERS.

	Date of. Admission
Dodds, Mrs A. M.; 7 Longstone View, Berwick-upon-Tweed . . .	1951
Purves, Miss E. J.; 18 Castle Terrace, Berwick-upon-Tweed . . .	1948
Purves, Thomas; 18 Castle Terrace, Berwick-upon-Tweed . . .	1923

ORDINARY MEMBERS.

Addison, Mrs O. S.; Coverheugh Cottage; Reston, nr. Eyemouth, Berwickshire	1964
Aitchison, Mrs A. L.; Tweedmount, Melrose	1930
Aitchison, Mrs B. H.; 15 Frogston Road West, Edinburgh, 10 . . .	1919
Aitchison, Henry A.; Lochton, Coldstream-on-Tweed	1946
Aitchison, T. W.; Lennel Bank, Coldstream	1964
Aitchison, William B.; Abbey St. Bathans, Duns	1963
Aiton, Mrs Scott; Birkhill, Earlstoun	1936
Alexander, Miss K. J.; 32 Castle Drive, Berwick-upon-Tweed . . .	1960
Anderson, T. D.; West Grove, Langtongate, Duns, Berwickshire . .	1957
Askew, Major J. M.; Ladykirk House, Berwick-upon-Tweed . . .	1958
Ayre, Mrs V. M.; Marshall Meadows, Berwick-upon-Tweed . . .	1959
Baker, Mrs G. S.; 2 Marygate, Berwick-upon-Tweed	1956
Baker, Mrs J. K.; Temperance Terrace, Berwick-upon-Tweed . . .	1959
Barber, Anthony O.; Newham Hall, Chathill	1953
Barstow, Mrs Nancy; Wedderburn Castle, Duns	1947
Bathgate, Mrs C.; The Neuk, Herriot, Midlothian	1960
Bayley, Miss H. M.; Mosslade, Gatehouse of Fleet, Kirkcudbright- shire	1949
Beadnell, Mrs J. C.; Ravensholme Guest House, 34 Ravensdowne, Berwick-upon-Tweed	1963
Bell, Mrs; Springfield Farm, Ord, Berwick-upon-Tweed	1963
Bell, G. M., Springfield, Tweedmouth, Berwick-upon-Tweed . . .	1958
Bennet, Hon. George W., M.A., F.B.H.L.; Polwarth Manse, Greenlaw	1953
Biddulph, Lady; The Pavilion, Melrose	1926
Blair, Miss A. L. Hunter; Padgepool, Wooler	1957
Blair, Miss K. M.; Monk's House, Seahouses, Northumberland . .	1964
Bluitt, Mrs C. V. S.; Westdale, Wooler	1955
Bodenham, N. H.; The Barn, Snitter, Thropton, Morpeth	1961
Bousfield, Mrs; Northfield, Lowick, Berwick-upon-Tweed . . .	1957
Bowlby, Mrs C.; Purves Hall, Greenlaw	1954
Boyd, Commander John G.; Whiterigg, St Boswells	1938
Brackenbury, Charles H.; Tweedhill, Berwick-upon-Tweed . . .	1947

LIST OF MEMBERS

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	Date of Admission.
Brigham, Miss M.; 41 Northumberland Road, Berwick-upon-Tweed	1955
Broadbent, Miss E.; Tower Cottage, Norham-on-Tweed	1955
Broadbent, H.; Greenhaven, Berwick-upon-Tweed	1960
Broadbent, Mrs; Greenhaven, Berwick-upon-Tweed	1960
Brooks, R.; Ednam House Hotel, Kelso	1950
Brotherstone, Mrs E. M.; Harehead, Cranshaws, Duns, Berwickshire	1964
Brown, Mrs Ella C.; West Learmouth, Cornhill-on-Tweed	1947
Brown, Mrs I; 30 Castle Drive, Berwick-upon-Tweed	1963
Brown, Miss M.; Bridgend, Duns, Berwickshire	1964
Bruce, Mrs O. V. C.; 39 Windsor Crescent, Berwick-upon-Tweed	1964
Bryce, T. H.; Westwoode, Gordon	1949
Buglass, Miss E. A.; 57 Castlegate, Berwick-upon-Tweed	1960
Buist, A. A., W.S., F.S.A.Scot.; Kirkbank, Kelso	1937
Buist, Mrs M. E.; Kirkbank, Kelso	1937
Burns, Miss N. D.; 4 Tintagel House, Berwick-upon-Tweed	1955
Butters, Mrs J. A.; Mardon, Castle Terrace, Berwick-upon-Tweed	1958
Butters, J. A.; Mardon, Castle Terrace, Berwick-upon-Tweed	1959
Calder, Mrs Dorothy F.; New Heaton, Cornhill-on-Tweed	1946
Calder, Miss E. F.; Meadow House Mains, Hutton, Berwick-upon-Tweed	1962
Calder, Mrs Harriet G.; Billiemains, Duns	1946
Carey, T. P.; Simprim, Coldstream	1964
Carr, Miss M.; 7 Lovaine Terrace, Berwick-upon-Tweed	1958
Carrick, G. P.; Sanson Seal, Berwick-upon-Tweed	1963
Carrick, J. M.; 15 Cheviot Terrace, Coldstream	1964
Carrick, Mrs Z.; 15 Cheviot Terrace, Coldstream.	1961
Cavers, Mrs J.; Pittlesheugh, Greenlaw	1964
Christison, Gen. Sir A. F. P., Bart.; The Croft, Melrose	1949
Clay, Miss B. A. S. Thomson; 19 South Oswald Road, Edinburgh, 9	1939
Clennell, Miss Amy Fenwicke; Dunstan House, Alnwick	1925
Cochrane, Miss A. M.; Waterside, Haggerston Castle, Beal, Berwick-upon-Tweed	1964
Cockburn, J. W.; Herriot Cottage, Cockburnspath, Berwickshire	1925
Cowan, Mrs Allister; Eastfield, Bowden, Melrose	1929
Cowe, Mrs I. C.; 2 Love Lane, Berwick-upon-Tweed	1954
Cowe, William, F.S.A.Scot.; 3 Albert Place, Berwick-upon-Tweed	1955
Cowe, F. M.; 2 Love Lane, Berwick-upon-Tweed	1958
Cowper, R. A. S. F.S.A.Scot.; Donwal, King's Road, Wallsend-on-Tyne	1963
Craw, H. A.; Greenways, Sutton Place, Abinger Hammer, Surrey	1933
Curle, Mrs C. L.; Easter Weens, Bonchester Bridge, Hawick	1960
Curry, Rev. O.; 64 Ravensdowne, Berwick-on-Tweed	1961
Davidson, Miss I. R.; Galewood, Duns Road, Coldstream	1958
Davidson, George E.; Beechknowe, Coldingham	1946
Davidson, Miss A. E.; Beechknowe, Coldingham	1961
Davidson, Miss H. C.; Kingswood, Windsor Crescent, Berwick-upon-Tweed	1954
Davidson, Mrs M. I.; Horsley, Reston, Eyemouth	1959
Dewar, Dr Robert H.; 8 Castle Terrace, Berwick-upon-Tweed	1948
Dickinson, Miss G. I.; 4 Greenside Avenue, Berwick-upon-Tweed.	1961
Dickson, A. H. D., C.A.; Coldie Castle, Fossoway, Kinross	1925
Dickson, Miss Mary, 71 Gala Park Road, Galashiels	1959

	Date of Admission.
Dickson, Miss H. M.; Swinton House, Duns	1955
*Dixon-Johnson, Major C. J., T.D., F.S.A.Scot.; Middle Ord, Berwick-upon-Tweed	1946
Dixon-Johnson, Mrs M. D.; Middle Ord, Berwick-upon-Tweed	1957
Dods, Mrs W. S.; 75 Ravensdowne, Berwick-upon-Tweed	1958
Donaldson-Hudson, Miss R., F.R.Hist.S.; The Clock Tower, Naworth Castle, Bampton, Cumberland	1951
Douglas, Mrs W. S.; Mainhouse, Kelso	1925
Dudgeon, Mrs E.; Lickar Moor Farm, Bowsden, Berwick-upon- Tweed	1963
Dudgeon, Mrs P. M.; Gainslaw Hill, Berwick-upon-Tweed	1954
Dykes, Mrs M. E.; Redheugh, Cockburnspath	1955
Edminson, Mrs A.; Main Street, Spittal, Berwick-upon-Tweed	1964
Elder, Mrs E. S.; Summerhill Terrace, Berwick-upon-Tweed	1954
Elder, Mrs; Tweed Street, Berwick-upon-Tweed	1955
Elliot, Miss G. A.; Birgham House, Coldstream	1936
Elliot, W. R.; Birgham House, Coldstream	1936
Evans, Mrs H. M.; Cleadon, 13 Palace Street, Berwick-upon-Tweed	1949
Falconer, Mrs Agnes W.; Auchencrow Mains, Reston	1925
*Finnie, Rev. J. I. C.; Eccles Manse, Kelso	1953
Finnie, Mrs S. H.; The Manse, Eccles, Kelso	1964
Fleming, George J.; Greenwells, Lauder	1946
Fleming, Miss H. B.; Greenwells, Lauder	1947
Fleming, Mrs M. R.; Renton House, Grantshouse	1958
Fleming, Mrs D. F.; Struan, Berwick-upon-Tweed	1960
Forster, C. P., M.A.; 1 Quay Walls, Berwick-upon-Tweed	1934
Frater, Mrs J.; Goswick, Berwick-upon-Tweed	1957
Furness, Lady; Netherbyres, Eyemouth	1961
Gibson, Miss E. M.; 23 Windsor Crescent, Berwick-upon-Tweed	1955
Gilmour, Lady Mary; Carolside, Earlstoun	1950
Girling, W. Graham; Wreigh Close, Thropton, Morpeth	1957
Glahome, Mrs J. A.; Longstone View, Berwick-upon-Tweed	1938
Glen, Mrs J. K. T.; Houndwood, Reston	1955
Goodson, Lady; Corbet Tower, Kelso	1953
Graham, Mrs E. I.; Shellacres, Cornhill-on-Tweed	1952
Graham, Mrs R. R.; Marmion Cottage, Norham	1958
Grainger, D. I. Liddell; Ayton Castle, Ayton	1956
Gray, Mrs N.; Grey Gordon, St Aidans, Seahouses	1957
Gray, Thomas D.; 41 Ravensdowne, Berwick-upon-Tweed	1958
Gray, Mrs; 41 Ravensdowne, Berwick-upon-Tweed	1958
Gray, Mrs Elginhaugh, 38 Craigmount Terrace, Corstorphine, Edinburgh 12	1958
Grehan, Miss M.; Lingerwood, Beadnell Road, Seahouses	1958
Grey, Mrs; Milfield Hill, Wooler	1962
Grieve, Mrs J. M.; 27 Windsor Crescent, Berwick-upon-Tweed	1950
Grieve, Mrs S.; Airhouse, Oxtou, Lauder	1963
Grieve, S.; Airhouse, Oxtou, Lauder	1963
Gunn, Rev. Peter B.; The Manse, Ancrum, Jedburgh	1923
*Haddington, The Rt. Hon. The Earl of, K.T., M.C.; Mellerstain, Gordon	1947
Hall, J. C.; Murmuran, Galashiels	1949

LIST OF MEMBERS

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	Date of Admission.
Hall, Mrs M. V.; 42 Castle Drive, Berwick-upon-Tweed	1963
Hamilton, Mrs C. B.; Lowood, Melrose	1949
Hardie, Mrs E.; Sunnyside, Duns	1958
Hardy, Miss E.; Summerhill, Ayton	1950
Hastie, Alex; Ravelston, Chirnside	1937
Hay, Lieut.-Col. G. H., D.S.O.; Duns Castle, Duns	1956
Henderson, Mrs John, Kimmerghame Heugh, Duns.	1957
Henderson, Mrs Sybil, Drysdale, Dunbar	1955
Henderson, T. S.; Colville House, Kelso	1936
Herriot, David R.; West Croft, East Ord, Berwick-upon-Tweed	1948
Hill, M.; Glanton Pike, Northumberland	1964
Hinton, Mrs T. C.; Fulfordlees, Cockburnspath, Berwickshire	1958
Hislop, Mrs E.; New Haggerston, Beal	1957
Hogg, Mrs; 2 Forrester Road, Edinburgh, 12	1959
Hogg, Mrs J. M.; 2 Bowmount, Dunbar	1956
Holderness-Roddam, Hon. Mrs Helen M. G.; Roddam Hall, Wooperton, Alnwick	1926
Holderness-Roddam, R.; Roddam Hall, Wooperton, Alnwick	1956
Holmes, Miss D. S.; 32a Bridge Street, Berwick-upon-Tweed	1953
Home, Major Hon. H. M. Douglas, M.B.E.; Old Greenlaw, Greenlaw	1957
Home, Lt.-Col. William M. Logan; Edrom House, Duns	1936
Home, Mrs D. L. Logan; Edrom House, Duns	1950
Home, Miss Sydney Milne; Cedar House, Paxton, Berwick-upon- Tweed	1924
Hood, James; Linhead, Cockburnspath	1932
Hood, T.; Townhead, Cockburnspath	1937
Horn, Mrs M.; Allerley, Melrose	1949
Horsburgh, Mrs E. M.; Hornburn, Ayton	1939
Howard, Mrs Mary L.; 9 Correean Drive, Edinburgh 10	1939
Hume, J. L.; British Linen Bank House, Duns	1949
Hunt, Mrs E. A.; Greenwell, Chirnside	1946
Hunter, Miss I. F.; St Aubyns, Lucker Road, Bamburgh, North- umberland	1958
Hunter, Miss V. E.; St Aubyns, Lucker Road, Bamburgh, North- umberland	1958
Hutchison, Mrs Mary M.; The Chesters, Lauder	1947
Hutson, Miss M.; Digby House, Chirnside, Berwickshire	1963
Jaboor, Mrs S. M.; Manorleigh, Scotts Crescent, Galashiels	1961
James, Gilbert T.; Sandford, Bamburgh	1952
Jamieson, M. Kirkbank House, Paxton, Berwick-upon-Tweed	1962
Jamieson, Mrs A. M.; Kirkbank House, Paxton, Berwick-upon- Tweed	1962
Jeffrey, Mrs M. H.; Viewpark, Reston	1964
Jeffrey, Mrs R.; 49 Market Square, Duns	1960
Jobling, Mrs M. A.; 163 Etal Road Tweedmouth, Berwick-upon- Tweed	1949
Jones, J. O.; Rosetta, Waverley Road, Eskbank, Dalkeith	1955
Johnson, Miss Eva E. R., M.A.; 26 Olympia Gardens, Morpeth, Northumberland	1937
Johnston, T. P.; 4 Palace Green, Berwick-upon-Tweed	1957
Johnston, Mrs E. S.; Palace Green, Berwick-upon-Tweed	1957
Keating, D. A. C.; Marden, Cumledge, Duns	1963

	Date of Admission.
Keenlyside, Dr. Ronald; 10 Bondgate Without, Alnwick	1933
Keenlyside, Mrs N. E.; 10 Bondgate Without, Alnwick	1959
Kirtley, Mrs H.; 66 Ravensdowne, Berwick-upon-Tweed	1961
Kitcat, Mrs J.; Hirsell Law, Coldstream-on-Tweed	1950
Knight, Mrs W. A. T.; 1 Wellington Terrace, Berwick-upon-Tweed	1958
Kohler, Mrs P.; 23 Swansfield Park Road, Alnwick, Northumber- land	1962
Leadbetter, Mrs E. M. G.; Knowesouth, Jedburgh	1932
Leadbetter, Miss S.; Knowesouth, Jedburgh	1937
Leather, Lieut.-Col. K. M. W.; Cheviot House, Castle Terrace, Berwick-upon-Tweed	1955
Leitch, J. S.; Longformacus, Duns	1948
Leith, Mrs W.; 20 The Meadows, Berwick-upon-Tweed	1958
Liddle, Mrs Alice; 3 Longstone View, Berwick-upon-Tweed	1956
Lindsay, John Vassie; Cornhill Farm House, Cornhill-on-Tweed	1946
Little, Miss D. D.; Crotchet Knowe, Galashiels	1960
*Little, Rev. Canon James Armstrong, M.A.; Monks Hatch, Liss, Hants.	1946
Little, Miss Sarah; Monks Hatch, Liss, Hants.	1947
Logan, Mrs M.; The Retreat, Blakerston, Duns	1958
Logan, Mrs E.; East Fenton, Wooler	1960
Long, A. G., M.Sc., F.R.E.S.; The Green, Gavinton, Duns	1955
Luke, D. J.; National Commercial Bank of Scotland, Kelso	1956
Lumley, Miss M. T.; 29 Bondgate Hill, Alnwick	1955
Lyal, Mrs H. S.; 44 Grange Road, Edinburgh, 9	1939
Lyal, Miss M. M.; 16 Spottiswoode Street, Edinburgh, 9	1935
M'Conville, Miss F. C.; Tintagel House, Berwick-upon-Tweed	1952
M'Cracken, Dr K. M.; Ingletane, Kelso	1951
M'Creath, Mrs G. C.; Bondington, Castle Terrace, Berwick-upon- Tweed	1958
M'Creath, G. C.; Bondington, Castle Terrace, Berwick-upon-Tweed	1959
McCreath, Mrs H. G.; The Old Farmhouse, Castle Terrace, Berwick-upon-Tweed	1963
McCrow, T. T.; Northfield House, St Abbs	1964
M'Dermott, Miss A.; Abbotsford, West Street, Norham-on-Tweed	1956
M'Dougal, Mrs. H. Maud; Flat 2, St Annes, York Road, North Berwick	1939
M'Dougal, J. Logan; Flat 2, St Annes, York Road, North Berwick	1950
M'Dougal, Mrs J. L.; Spottiswoode, Gordon, Berwickshire	1958
MacLaughlan, Rev. F.; The Manse, Swinton, Duns	1962
*M'Whir, Mrs M. H.; Softlaw, 23 Castle Drive, Berwick-upon-Tweed	1938
Martin, Colin D.; Friars Hall, Melrose	1947
Martin, Mrs Jessie D.; 46 Castle Terrace, Berwick-upon-Tweed	1949
Martin, Mrs Margaret L.; 15 Tweed Street, Berwick-upon-Tweed	1955
Mather, J. Y.; Linguistic Survey of Scotland, 27 George Square, Edinburgh, 8	1956
Mauchlan, Adam; Homecroft, Horncliffe, Berwick-upon-Tweed	1952
Mauchlan, Mrs Eleanor M.; Homecroft, Horncliffe, Berwick-upon- Tweed	1928

LIST OF MEMBERS

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	Date of Admission.
Middlemas, Mrs E. M.; The Old Rectory, Howick, Alnwick	1951
Middlemas, R. J., M.A.; The Old Rectory, Howick, Alnwick	1928
Middlemas, Mrs; Roseworth, Kelso	1960
Middlemas, Miss V. M.; Kincraig, Broompark, Kelso	1963
Miller, Mrs A. S.; West Loan End, Berwick-upon-Tweed	1957
Miller, Mrs H. G.; 111 Marygate, Berwick-upon-Tweed	1954
Milligan, J. A.; Yetholm Mill, Kelso	1942
Mills, Fred; Mayfield, Haddington	1916
Mitchell, Mrs; St Leonards, Castle Terrace, Berwick-upon-Tweed	1957
Mitchell Innes, Mrs M. G.; Whitehall, Chirnside	1960
Mitchell-Innes, C.; Millbank, Ayton, Berwickshire	1963
Mitchinson, Miss I.; Cookstead, Cornhill-on-Tweed	1961
Moffat, J. B., A.R.I.B.A.; St John's. 79 Main Street, Spittal, Berwick-upon-Tweed	1950
Moffat, Mrs M. G.; St John's, 79 Main Street, Spittal, Berwick-upon-Tweed	1949
Moffet, Miss M.; North Ancroft, Berwick-upon-Tweed	1957
Mole, Mrs I.; Greenburn, Reston	1954
Moralee, Mrs E.; North Charlton, Chathill, Northumberland	1959
Morris, Miss W. J.; Easter Softlaw, Kelso	1951
Morton, Mrs H. S.; 3 The Wynding, Bamburgh	1949
Muir, Mrs A. M.; 26 Windsor Crescent, Berwick-upon-Tweed	1957
Murray, Mrs Marian Steel; 8 Northumberland Avenue, Berwick-upon-Tweed	1946
Murray, Mrs J. M.; Caverton, Hillhead, Kelso	1960
Newbigin, Miss A. J. W.; 5 Haldane Terrace, Newcastle-on-Tyne	1946
Nichol, Miss T. M.; "Rosedon," Duns Road, Coldstream, Berwickshire	1964
Niven, Mrs J. P.; Whitsome Hill, Duns	1957
Ogg, James E.; Cockburnspath	1921
Ogilvie, Mrs H. M. E.; The Chesters, Ancrum, Jedburgh	1960
Oliver, Mrs A. A.; Thirlstane, Yetholm, Kelso	1951
Oliver, Mrs Katherine; Edgerston, Jedburgh	1924
Pape, Miss D. C.; Grindon Corner, Norham-on-Tweed	1933
Pate, Mrs; Horseupcleugh, Longformacus	1928
Pate, Mrs H. K.; Redpath, Duns	1959
Pate, Miss J. M.; Cairnbank, Duns	1960
Pate, Mrs; West Blanerne, Duns	1960
Patrick, Miss Isabella B.; Elmbank, Castle Terrace, Berwick-upon-Tweed	1950
Patterson, Mrs E. W.; Chateau Pedro, Castle Hills, Berwick-upon-Tweed	1953
Patterson, Miss Marjorie E.; Prudhoe House, Alnwick	1946
Patterson, W. Y.; Mill House, Linstock, Carlisle	1961
Peacock, Miss J. E.; Grieve Lodge, Tweedmouth, Berwick-upon-Tweed	1958
Peacock, Miss M. A.; Grieve Lodge, Tweedmouth, Berwick-upon-Tweed	1958
Peake, Mrs E. M.; Hawkslee, St Boswells	1946
Pearson, E.; 10 The Meadows, Berwick-upon-Tweed	1964
Pender, Mrs M. Y.; Shawbraes, Reston, Eyemouth, Berwickshire	1964
Pitman, Mrs C.; 14 Oswald Road, Edinburgh, 9	1951

	Date of Admission.
Playfair-Hannay, Mrs M. J.; Baltilly, Ceres, Fife	1937
Pratt, Mrs A. S.; Cedar House, Paxton, Berwick-upon-Tweed . .	1954
Price, Major J. H.; Dilwyn, Cornhill Road, Tweedmouth, Berwick- upon-Tweed	1960
Price, Mrs. R. E.; Dilwyn, Cornhill Road, Tweedmouth, Berwick- upon-Tweed	1953
Pringle, Miss C.; 5 Middleton Hall, Belford	1963
Purvis, Mrs J.; Richmond Villa, Horncliffe, Berwick-upon-Tweed .	1953
Ramsey, Alan D. M.; Bowland, Galashiels	1954
Reay, Mrs E.; Elwick, Belford	1955
Reed, Mrs J.; Berrington Law, Ancroft	1957
Robertson, Miss A. H.; Cawderstanes, Berwick-upon-Tweed . .	1948
Robertson, D. M.; Buxley, Duns	1950
Robertson, Miss Ethel G.; Cawderstanes, Berwick-upon-Tweed .	1946
Robertson, Ian Alastair; Louvre Cafe, Alnwick	1957
Robertson, Miss I. M.; Struan, Northumberland Avenue, Berwick- upon-Tweed	1962
Robertson, Miss Janet E.; Cawderstanes, Berwick-upon-Tweed .	1946
Robertson, J. W. Home; Paxton House, Berwick-upon-Tweed . .	1947
Robertson, Mrs L. R.; Buxley, Duns	1950
Robson, Mrs D.; Venchen, Yetholm, Kelso	1957
Robson, Mrs D. C.; Overblane, Wooler	1961
Robson, Mrs F. E. F.; Ford Way, Horncliffe, Berwick-upon-Tweed	1950
Robson, Mrs. G. G.; Presson Hill, Kelso	1963
Robson-Scott, Miss Marjorie; Newton, Jedburgh	1918
Rodger, Miss Jane B.; Ferniehurst, Melrose	1939
Romanes, Mrs S.; Norham Lodge, Duns, Berwickshire	1963
Rose, J. D.; Dunstan Hall, Craster, Alnwick	1963
Rowe, C. M.; Factor's House, Dunglass, Cockburnspath	1964
Rutherford, Miss A. M.; The Cottage, Seahouses	1957
Salisbury, Rev. H. G.; The Vicarage, Norham-on-Tweed	1964
Sanderson, Mrs; Raecloughhead, Duns	1928
Sanderson, Miss I. E. P.; Fernlea, 2 West Acres, Alnwick . . .	1951
Scott, A. H.; Tweedsyde, Melrose	1964
Scott, Mrs A. E. W.; Tweedsyde, Melrose	1964
Scott, Mrs E. M.; Buckton, Belford	1955
Shiell, G. D.; Rennieston, Jedburgh	1964
Short, David C.; Humbleton, Wooler	1946
Simpson, Mrs R. E.; Ellem Lodge, Ellemford, Duns	1964
Simpson, Mrs Dorothy; 9 Doune Terrace, Edinburgh, 3	1922
Skelly, Mrs A. E.; High Letham, Berwick-upon-Tweed	1955
Smail, Col. James I. M., M. C.; Kiwi Cottage, Scremerston, Berwick- upon-Tweed	1948
Smart, Mrs C.; Grosvenor Place, Tweedmouth	1950
Smart, Mrs E. D.; Leadgates, Gt. Whillington	1964
Smart, Mrs M.; 29 West Acres, Alnwick	1953
Smith, Mrs D. G. Wilson; Cumledge, Duns	1947
Smith, Mrs J. E. T.; 20 Castle Terrace, Berwick-upon-Tweed .	1957
Smith, J. E. T.; 20 Castle Terrace, Berwick-upon-Tweed	1960
Smout, Mrs. E. S.; 1 Mansefield Road, Tweedmouth, Berwick- upon-Tweed	1960
Somervail, Mrs D.; Silverwood, Broomdykes, Duns, Berwickshire	1960

	Date of Admission.
Somervail, Mrs M. J.; Broomdykes, Duns, Berwickshire	1963
Spark, Mrs Liliac C.; Ellangowan, Melrose	1925
Sprunt, Mrs B. R.; 36 Castle Terrace, Berwick-upon-Tweed	1937
Stawart, James; Kimmerston, Wooler	1948
Stewart, Mrs.; Abbotslee, Highcross Avenue, Melrose	1961
Stewart, Mrs M. L.; Leader View, Earlston, Berwickshire	1963
Stoddart, Miss A. Y.; Kirklands, Melrose	1933
Stott, Fred, junr.; 104 Marygate, Berwick-upon-Tweed	1950
Suthers, Miss E.; Monk's House, Seahouses, Northumberland	1964
Swan, Mrs D. K.; Harelaw, Chirnside	1946
*Swinton, Rev. Canon Alan Edulf, M.A.; Swinton House, Duns	1915
*Swinton, Mrs E. K.; Swinton House, Duns	1923
*Swinton, Brigadier Alan H. C.; Kimmerghame, Duns	1938
Tait, Mrs E.; Roselea, Kelso	1951
Tancred, Mrs D. H. E.; Weirgate House, St Boswells	1938
Tankerville, The Countess; Chillingham Castle, Wooler	1939
Taylor, Miss Fanny; Library Flat, Horncliffe House, Berwick-upon-Tweed	1955
Telfer, Gilbert; Caverton Mill School House, Kelso	1954
Telfer, Miss Morag; Caverton Mill School House, Kelso	1961
Thompson, Miss E. M. C.; 37 Ann Street, Edinburgh	1960
Thomson, Mrs Moffat; Lambden, Greenlaw	1934
Thomson, T. D.; The Hill, Coldingham, Eyemouth, Berwickshire	1964
Thomson, Mrs J.; Hetton Hall, Chatton, Alnwick	1963
Thorburn, Mrs M. B.; 1 Windsor Crescent, Berwick-upon-Tweed	1960
Thorp, R. W. I., B.A.; Charlton Hall, Chathill, Northumberland	1955
Trotter, Mrs Y.; The Wellnage, Duns, Berwickshire	1963
Turner, T. Ramsay; The Rowans, Ayton	1952
Veitch, Mrs Alice M.; Springbank, Berwick-upon-Tweed	1952
Vernon, Lt.-Col. G. F. D.; St Rules, Dunbar	1950
Walker, Dr J. H.; Whitelands College, Putney, London, S.W.15	1963
Walker, Maxwell; Springwells, Greenlaw	1932
*Walton, Rowland H.; Wilkinson Park, Harbottle, Morpeth	1951
Wardale, Mrs E.; Akeld Manor, Wooler	1958
Watson, Miss E. B.; 7 Bowers Crescent, Tweedmouth, Berwick-upon-Tweed	1963
Weatherston, Miss J. F.; 3 Greenside Avenue, Berwick-upon-Tweed	1959
Wells, Mrs Mary T.; 4 College Place, Berwick-upon-Tweed	1952
White, Mrs; Rosemount, Chirnside, Duns	1958
White, T.; Pathhead, Cockburnspath	1950
Wight, Mrs M. I. D.; The Birn, Cockburnspath	1949
Willins, Miss E. P. L.; Kirklands, Ayton	1951
Wilson, Mrs M. C.; Primside Mill, Yetholm, Kelso	1956
Wilson, Mrs M. L.; Glenholm, Horncliffe	1960
Wood, G. I.; Fern Neuk, Coldingham	1959
Wood, J. R.; The Hermitage, Duns, Berwickshire	1950
Young, Miss B.; 13 Glenisla Gardens, Edinburgh, 9	1954
Young, G. A.; The Tower, Cockburnspath	1964
Younger, Miss I.; 2 Ord Hill House, Berwick-upon-Tweed	1961

JUNIOR MEMBERS.

Brigham, J. K.; 17 South Meade, Timperley, Altrincham, Cheshire	1964
Brotherstone, Miss A.; Harehead, Cranshaws, Duns	1964
Cavers, J. K.; Pittlesheugh, Greenlaw	1964
Christison, Alexander; 13 North Terrace, Berwick-upon-Tweed	1955
Hood, Miss Isobel; Townhead, Cockburnspath	1959
Hood, John; Townhead, Cockburnspath	1959
Johnstone, Miss I.; 9 Suffolk Road, Edinburgh 10	1955
Johnstone, Miss P. M.; 9 Suffolk Road, Edinburgh 10	1955
Martin, James L.; 15 Tweed Street, Berwick-upon-Tweed	1957
Robertson, M. R.; Buxley, Duns, Berwickshire	1963
Walton, Miss B.; Wilkinson Park, Harbottle, Morpeth	1963
Walton, Miss P.; Wilkinson Park, Harbottle, Morpeth	1963
Wardale, John, Akeld Manor, Wooler	1958

HONORARY MEMBERS.

Brown, Miss Helen M.; Longformacus House, Duns
 Neill Fraser, P. W.; 212 Causewayside, Edinburgh, 9

SUBSCRIBING LIBRARIES.

The American Museum of Natural History, 79th and Central Park West
 New York 24, N.Y.
 The Balfour & Newton Libraries, Dept. of Zoology, Downing Street,
 Cambridge
 The Hancock Library of Biology and Oceanology, University of Southern
 California, Los Angeles 7, California, U.S.A.
 Literary and Philosophical Society, Newcastle-on-Tyne, per H. C. Pottinger.
 Public Library, New Bridge Street, Newcastle-on-Tyne, per Basil Anderton
 Royal Society of Edinburgh, 22/24 George Street, Edinburgh, 2, per W. H.
 Rutherford, Assistant Secretary
 Society of Antiquaries of London, Burlington House, Piccadilly, London,
 W.1
 Cleveland Public Library, 325 Superior Avenue, N.E., Cleveland, Ohio,
 U.S.A., per W. Heffer & Sons, Ltd., Petty Cury, Cambridge
 New York Public Library, Preparation Division Acquisition Branch, 5
 Avenue, 42nd Street, New York, 18, U.S.A.
 Northumberland County Library, The Willows, Morpeth
 The Librarian, University Library, Queen Victoria Road, Newcastle-on-
 Tyne.
 University Library, per D. MacArthur, Esq., St. Andrews, Scotland

EXCHANGES.

The Society of Antiquaries of Scotland, Queen Street, Edinburgh, 2
 The British Museum, Copyright Office, London
 Dumfries and Galloway Natural History and Antiquarian Society, Dumfries
 The Botanical Society, Inverleith Row, Edinburgh, 4
 East Lothian Antiquarian and Field Naturalists' Society, c/o George Murray, 30 Haldane Avenue, Haddington
 The Natural History Society of Northumberland and Durham, Newcastle-on-Tyne, The Hancock Museum, Newcastle-on-Tyne 2
 The Society of Antiquaries, Newcastle-on-Tyne
 The Bodleian Library, Oxford
 The Royal Meteorological Society, London
 The British Association, Burlington House, Piccadilly, London, W.1
 National Library of Scotland, Parliament Square, Edinburgh, 1
 The Hawick Archaeological Society, Wilton Lodge, Hawick
 The Scottish Historical Review, c/o Thomas Nelson & Sons, Ltd., Edinburgh, 9
 Council for Nature (Intelligence Unit), 41 Queen's Gate, London, S.W.7
 Glasgow Archaeological Society, c/o Art Gallery and Museum, Glasgow, C.3
 Scottish Ornithological Club, c/o Mrs George Waterson, 21 Regent Terrace, Edinburgh, 7.

NEWSPAPERS.

The Editor, *The Border Counties Chronicle and Mail*, Kelso
 The Editor, *The Advertiser*, Berwick-upon-Tweed
 The Editor, *The Guardian*, Alnwick
 The Editor, *The Border Standard*, Galashiels
 The Editor, *The Express*, Hawick
 The Editor, *Southern Reporter*, Selkirk

COUNCIL (1963).

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Editing Secretary.
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 Brigadier Alan H. C. Swinton, M.C., F.S.A.Scot., Kimmerghame, Duns.
 D. Mackenzie Robertson, Buxley, Duns.
 Capt. R. H. Walton, F.S.A.Scot., Wilkinson Park, Harbottle, Morpeth.
 A. G. Long, Esq., M.Sc., F.R.E.S., F.R.S.E., Gavinton, Duns.
 James Hood, Esq., J.P., Linhead, Cockburnspath.

PAST PRESIDENTS.

Finnie, Rev. J. I. Crawford, F.S.A.Scot., The Manse, Eccles, Kelso.
Haddington, The Rt. Hon. The Earl of, K.T., M.C., Mellerstain, Gordon
Haggerston, Captain Sir Hugh Carnaby de Marie, Bart.; Ellingham Hall,
Chathill, Northumberland
Home, Sir John Hepburn Milne; Elibank, Walkerburn
Little, Rev. Canon J. A., M.A.; The Vicarage, Norham
McWhir, Mrs M. H.; 23 Castle Drive, Berwick-upon-Tweed
Swinton, Brigadier Alan H. C.; Kimmerghame, Duns
Swinton, Rev. Canon A. E., M.A.; Swinton House, Duns
Swinton, Mrs E. K.; Swinton House, Duns
Walton, R. H., F.S.A.Scot.; Wilkinson Park, Rothbury



HISTORY
OF THE
BERWICKSHIRE
NATURALISTS' CLUB

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PROCEEDINGS
OF THE
BERWICKSHIRE NATURALISTS' CLUB

THE HISTORICAL EVOLUTION
OF THE BORDER

Address delivered to the Berwickshire Naturalists' Club, at Berwick, on 7th October, 1964, by Miss Ruth Donaldson-Hudson, B.A., F.R.Hist.S.

THE BORDERLANDS IN EARLY HISTORY

Frontiers tend to be laid down arbitrarily, by kings or statesmen in conference ; or they may have arisen by accident, the accident of tribal war or ancient inheritance, or of some convenient geographical feature such as a great river or a high range of mountains. Rarely, if ever, do they take racial differences into account ; indeed, it is impossible for them to do so because peoples and races, like cock pheasants, tend to stray over the boundary on to their neighbours' territory.

The thesis I want to develop is that the Anglo-Scottish Border is fundamentally only a convenient administrative boundary. For the first 1100 years of the Christian era there were more bonds of union between the lands immediately north and south of the Border Line than there were barriers. There were religious, racial, linguistic, and even politico-social links. It is only just over 800 years since the whole line of the Border, as we know it today, was finally settled ; and even then mutual relations between the inhabitants on either side of the line were influenced not so much by national patriotism

as by family and feudal loyalties (or sometimes vendettas !) that took scant notice of lawfully-established frontiers. I will enlarge on this aspect of the question in due course.

The Romans were the first people to establish some sort of a frontier between North and South, between their "occupied territory" and the wild rugged country of northern Britain. This frontier was guarded by Hadrian's great wall, running from east to west across the narrowest part of the island, from the mouth of the Tyne to the southern shores of the Solway. Although the Roman armies penetrated far beyond the Wall on several occasions, notably under Agricola (c 80 A.D.) and under Lollius Urbicus in the time of the Emperor Antoninus (Hadrian's successor), they never permanently subdued the northern tribes such as the Maeatae, the Caledonii, and the Picts or Painted People. So for all practical purposes we may regard the line of Hadrian's Wall as the northern limit of Roman administration.

In the time the Roman Empire began to crumble, the last of the legions were withdrawn from Britain in 410 A.D., and the Britons were left to fend for themselves, as best they could, against the invading Angles and Saxons. Though the Wall was to survive to our day as a structural feature, as a monument to Roman engineering, it ceased to exist as a frontier. Even before this, from about 370 A.D., the Tyne gap had ceased to be the heavily-fortified, strongly-garrisoned zone of military government that it had previously been. Instead a number of British kingdoms had been established under Roman protection, bestriding Hadrian's Wall and extending as far north as the Forth-Clyde line, where the Antonine Wall had once stood. As their very existence depended on their ability to resist the inroads of the more northerly tribes, they virtually took over the burden of defending the frontier of Roman Britain. Among these buffer kingdoms that emerged at the beginning of the 5th century were those of Strathclyde, with Dumbarton as its capital, and *Mannau Gododdin* (or *Guotodin*), the tribe whom the Romans called *Votadini*, who

occupied the land from the Tyne to the Forth and had one of their great strongholds at Traprain Law.

After the departure of the Romans there followed the Dark Ages, as they are called, when what had been a well-ordered province of a great empire relapsed into chaos and semi-barbarism. During the Roman occupation the natives had learnt civilised ways and customs and had to a great extent been Christianised. But the new invaders, who worshipped Thor and Woden, drove out Christianity from the lands they conquered. However, pockets of resistance to this new wave of paganism managed to survive, notably in Wales and south-west Scotland. St. Patrick, the apostle of Ireland, may have come from the Scottish shores of the Solway, although there is some doubt about this; another school of thought holds that he was born in South Wales near the Severn estuary. Certain it is that, apart from that brief episode of Paulinus (the monk from Canterbury)'s conversion of Edwin and his Northumbrian nobles, Christianity came to northern England from Scotland. (I am here using the names of the two countries in their modern sense). This is therefore a suitable time, I think, to consider those religious links to which I have already referred and which were among the earliest bonds of union between Scotland and northern England.

RELIGIOUS AND ECCLESIASTICAL LINKS

The first of these was formed by St. Ninian, who was born about 350 A.D., and who became the Bishop of the "Southern Picts." His main work was probably done in Galloway: he founded the church of *Casa Candida* at Whithorn in Wigtonshire and dedicated it to St. Martin of Tours, whose disciple and friend he had been.

His missionary work doubtless took him across the Solway into Cumbria and we may note that there is St. Ninian's Well in the little village of Wreay, a few miles south of Carlisle; and that the church at Brougham, on the northern edge of Westmorland, just south of Penrith, is dedicated to St. Ninian.

There may also be some significance in the fact that two churches in the diocese of Carlisle, the one at Brampton in Cumberland, and the other at Martindale on the Westmorland shore of Ullswater, are dedicated to St. Martin. I have long had a theory that these uncommon dedications may be attributed to the influence of St. Ninian, and it was interesting to learn of an old tradition that the saint had preached under a tree that bore his name, which used to stand hard by Brampton Old Church.*

A century and a half after Ninian we have St. Kentigern, or Mungo, the "Apostle of Strathclyde," who, in 543, became Bishop of Glasgow, whose patron saint he is. Driven out of Scotland by the heathen king Morken, he sought refuge in Wales where he founded the monastery of St. Asaph. What is more likely, I suggest, than that on his way through to Wales he should preach the gospel in Cumbria and found churches there? At all events no fewer than eight churches in Cumberland are dedicated to him. Seven of these lie to the west or south-west of Carlisle, towards the Solway or bordering on the Lake District. In one of them the name of the saint is preserved in the first syllable of the place-name, *Mungrisdale*. The eighth church is at Irthington, the next parish to Brampton and therefore very near to Northumberland, and we may wonder whether Irthington marks the easternmost limit of Kentigern's missionary wanderings in Cumberland.

Contemporary with St. Kentigern was the Irish saint, Columba, a disciple of St. Finnan, who followed St. Patrick. Although he had no direct connection with our Border country, I mention him here because he founded the monastery in Iona and it was from Iona, some forty years after Columba's death, that Aidan came to Northumbria at the request of King Oswald. St. Aidan was the true apostle of the Northumbrians—and the term covers the inhabitants of south-east Scotland as well as those of north-east England. He re-

* Brampton Old Church, of which only a fragment now remains, is about a mile from the modern township, and was built on the site of one of Agricola's forts on the Stanegate.

kindled the flame of Christianity which had been extinguished by the heathen Mercians under their king, Penda. He also founded the abbey of Lindisfarne, which like its parent religious house, stands on an island : this would give security from land attack but at the same time it had reasonable access to the mainland where missionary work was to be done.

As an instance of the close connection and two-way traffic between what are now northern England and southern Scotland (although at that time they were all one country), I may cite the case of the monk Boisil who went from Lindisfarne to found a monastery at Old Melrose. His name survives in the neighbouring township of St. Boswells.

The greatest of the Northumbrian saints was yet to come, a generation after Aidan and Boisil. This was St. Cuthbert, born about 635, the year in which Aidan first went to Northumbria. He started life as a shepherd boy in the Leader valley, but in 651 joined the monastery of Old Melrose, where, ten years later, he succeeded Boisil as Prior. In 676, however, he retired as a hermit to a rocky islet off the Farne Islands. But he was persuaded by the Northumbrian king, Egfrith, to come out of his seclusion and to accept the bishopric of Hexham, which he later exchanged for that of Lindisfarne. Within a year of his death, which occurred in 687, he withdrew again from active life and returned to his hermit's cell on House Island. But, during his ten years as a bishop, he travelled far and wide over Lothian and Northumberland and into Cumberland, preaching the gospel and establishing churches.

One of Hexham Abbey's most valued relics is a tiny copper-gilt chalice, of Anglo-Saxon workmanship, dating from the late 7th century. "Unique in respect of size and material," according to the British Museum, it is probably an extremely rare example of the small chalice used with a portable altar, such as St. Cuthbert is known to have had and which is now in the Library of Durham Cathedral. There is, therefore, a very strong probability that this lovely little chalice was used by

St. Cuthbert on his missionary journeys throughout northern England and southern Scotland.

So much for the ecclesiastical history of the Borderlands in those far-off days. It is only a brief survey that I can give here and now, and it is mainly the story of the conversion to Christianity, during the early Dark Ages, of the peoples of Strathclyde and Cumbria, of Lothian and Northumbria. Dark, indeed, they must have been for all the inhabitants of Britain, but in this part of the island the night sky must have been ablaze from time to time with the "Northern Lights," those saints of the old Celtic Church whose lives and work I have outlined.

POLITICAL DEVELOPMENTS, FROM THE ANGLO-SAXON CONQUEST TO THE 12th CENTURY

The political history of the Borderlands is not very glamorous and consists chiefly, I fear, of a recital of bitter feuds between warring races or kingdoms. In fact, it reads very like a chapter of "1066 And All That," in which there is a procession of kings whose names mostly begin with *Ethel* or *Eg*, and who were "good kings" or "bad kings" according to whether they won their battles or lost their kingdoms!

Before embarking on these, we should first notice one aspect of the Anglo-Saxon invasions. Whereas the Romans had invaded Britain from the south, gradually pushing their advance northwards and therefore having to establish their frontier on a line running east and west, the main attack of the Anglo-Saxons, who came across the North Sea, was from the east. They drove the native Britons, whom they called *Welsh*, meaning strangers or foreigners, westward: into *West Wales* (Devon and Cornwall), into *North Wales* (Wales proper), and into Cumbria—which comprised Cumberland, Westmorland and Lancashire. Consequently we find, after the Anglo-Saxon conquests, a north-south line of demarcation, extending from the English Channel to the Firth of Forth.

On the east coast from the Humber to the Tees lay the Anglian kingdom of Deira; between Tees and Tyne was a sort of no-man's-land of wild forest; northwards from the Tyne lay Bernicia, another Anglian kingdom; and the whole region was presently to be united into the great kingdom of Northumbria. The eastern part of the Borderlands was therefore an Anglian domain. But on the west side the Britons, or Welsh, held out in Cumbria and in south-west Scotland. We have to remember this racial division between east and west.

Ethelfrith is the first noteworthy king to come into our story. He had united the kingdoms of Deira and Bernicia and had established Northumbria as the most powerful state in Anglo-Saxon Britain. In 607 he defeated the Welsh at Chester, thereby driving a permanent wedge between Wales and Cumbria. The latter's southern limit was pushed back from the Mersey to the Ribble, and from now on the Cumbrian Welsh became closely associated with their brethren north of the Solway, the Britons of Strathclyde. The latter, at this date, was really a loose confederation of petty states: it comprised Strathclyde proper (*i.e.*, Clydesdale) in the north, the kingdom of Rheged in the lands just north of the Solway, and now Cumbria to the south of the Solway. It is a far cry from Northumbria to Chester, yet the battle there had its repercussions in the western Borderlands.

Next, in 617, King Edwin of Northumbria subdued the whole of Anglo-Saxon England except Kent and he thereby became *Bretwalda* (overlord) of the Heptarchy. Under this great king all of south-east Scotland became incorporated into Anglian Northumbria, which was now firmly established as the dominant power in the land. It is commonly believed that Edwin gave his name to Edinburgh, anciently Dun-Edin, but W. J. Watson in his "Celtic Place-Names of Scotland" rather pooh-poohs this theory: he holds that the component *Edin* is purely Celtic in origin.

There is good reason for believing that Edwin was master, too, of Rheged and north Cumbria. According to Bede, he

made his influence felt even in the Isle of Man and to achieve this he must have had control of Carlisle and the Solway.

Edwin, as you will remember, married a Christian princess Ethelburga of Kent. She took with her to Northumbria the Roman monk, Paulinus (one of Augustine's followers), who in 627 converted Edwin and his thanes to Christianity. The old church at Kirknewton, which the Club visited in 1962, is thought to have been founded by Paulinus: it is very near Yeavering Bell, where Edwin had his palace, and significantly it is dedicated to St. Gregory, who had sent the first missionaries to Kent in 597.

In 633 Edwin was defeated and slain in battle near Doncaster by Penda, the heathen king of Mercia, allied with the Welsh king Caedwallon. The latter now became ruler of Northumbria, which relapsed into paganism.

But now came Oswald, another great and good king. A younger son of the earlier king Ethelfrith, he had fled from Penda and sought refuge in Iona. Returning to his native land in 635, he roundly defeated Caedwallon near Corbridge, and regained his kingdom. As we drive along the Military Road from Stagshaw Bank to Chollerford, let us remember Oswald, for the great, tall wooden cross on the roadside at Heavenfield marks the spot where, traditionally, he is supposed to have knelt and prayed for victory in the coming battle against his heathen foes. A field away from the road stands the little church of St. Oswald's-on-the-Wall. The present church is a plain 18th century building, but on the site of a very ancient foundation mentioned by Bede.

As already said, Oswald was responsible for bringing St Aidan from Iona to reconvert the Northumbrians to Christianity, and it was Aidan who founded Lindisfarne Abbey.

In 642 Oswald was killed in battle against Penda near Oswestry (Oswald's-tree) in Shropshire, but under his brother Oswy* the struggle continued against the heathen Mercians

* Oswy had married a descendant of Urien, one of the last kings of Rheged, which brought that region securely under Northumbrian rule from about 648.

until eventually Penda was slain in battle, near Leeds. Thanks to the persuasions of Oswy's son, Alcfrith, Penda's son became a Christian and married Oswy's daughter; while Alcfrith himself married the Mercian princess Cyneburga.** At this juncture the Church in Northumbria, as well as the military power of its kings, played a large part in the conversion of the Mercians. The first bishop of Mercia, who built the earliest church at Lichfield and made it the centre of a great Midland diocese, was St. Chad, originally a monk at Lindisfarne and a pupil of St. Aidan. It shows how the influence of the old Celtic Church—founded by Patrick in Ireland, carried forward by Columba into western Scotland, and thence by Aidan into Northumbria—was now spreading far and wide into central England.

Ecgrith succeeded Oswy in 670 and it was during his reign that a memorable event took place, namely the coming of St. Cuthbert, to whose missionary work I have already referred.

Ecgrith was a mighty man of war. He not only ruled over north-east England and south-east Scotland, from the Humber to the Forth, but he extended his kingdom westwards by chasing the Welsh out of the "Land of Carlisle" (the name given to that part of Cumbria stretching from the Solway in the west to the headwaters of the River Eden and to the River Derwent in the east). He overstepped himself, however, when he tried to carry his conquests north of the Forth by attacking the Pictish king. In 685, at Nectansmere (Dunnichen Moss) in the county of Angus, he was defeated and slain in battle.

From that time on the military power of Northumbria began to decline, chiefly because of "family squabbles" between rival branches of the ruling house. Between 685 and the end of the 8th century there were no fewer than a dozen kings, many of whom were dethroned by a rival claimant and two were murdered. One exception was Eadberht who not only

** It was thought formerly that Alcfrith's and Cyneburga's names were inscribed on Bewcastle Cross; but a more recent theory is that these were misreadings of the ancient runes.

ruled for twenty-one years but, in alliance with the Pictish king Unust (Angus), defeated the Britons of Strathclyde, seizing their headquarters at Dumbarton and adding all their territory to his dominions.

Nevertheless, in spite of the general weakness of its kings, the prestige of Northumbria remained high on the continent throughout the 8th century. It maintained "diplomatic relations" with the Emperor Charlemagne, it sent missionaries and scholars abroad to Germany. At home, the Church was strong, producing some notable archbishops of York, great builders as well as able administrators, and distinguished scholars like Bede and Alcuin. Christian culture and the arts flourished side by side, as witness the exquisite Lindisfarne Gospel Book and the monumental stone crosses at Ruthwell, Bewcastle and elsewhere.

The next chapter of Northumbrian history is darkened by the coming of the Danes and Vikings. In 793 they sacked Lindisfarne, the following year they attacked Jarrow and Monkwearmouth, and in the succeeding decades the North-men descended on this country with ever-increasing frequency, strength and savagery until by 870 they had overrun Northumbria, East Anglia, and most of Mercia. Before the coming of the Danes, however, the kingdom of Mercia, under Offa, had ousted Northumbria from its position of being the dominant political power in Anglo-Saxon England, only to be displaced in its turn by the powerful kings of Wessex, of whom the most eminent was Alfred the Great.

In 826, we find the nobles of Northumberland accepting King Egbert of Wessex as their overlord. Egbert, the first Saxon "King of all the English," thus extended his sway from the English Channel to the Firth of Forth. But, we may note, the Picts and Scots did not submit to him, nor did the Britons of Strathclyde and Cumbria: in other words the old division between the eastern and western peoples of Britain still held good.

Meanwhile there had been other momentous developments,

From the middle of the 6th century the northern half of Britain had become the home of four distinct peoples : the Picts in the lands beyond the Forth on the eastern seaboard and in the far north ; the Scots in their western kingdom of Dalriada ; the Welsh-speaking Britons in Strathclyde and Galloway ; and the Angles of Northumbria, between Tweed and Forth. From the end of the 8th century, however, the continued onslaughts of the North-men, while contributing so largely to the break-up of the Northumbrian empire, proved to be a main factor in the unification of Picts and Scots, which again was but a first step in the gradual coalescence of all the northern kingdoms. In 839, the year in which Egbert of Wessex died, the Pictish king was defeated and killed in battle by the Norse and the power of the Picts was shattered for ever. As a result Kenneth Macalpin, king of the Scots, was able in 843 to unite Pictland with his own kingdom of Dalriada—a union that was never to be broken thereafter. Henceforth the northern region of Briton gradually came to be known as “Scotland”—and “Scotland” was soon to become a political entity to be reckoned with, as we shall presently see.

Nevertheless Kenneth Macalpin and his successors had a thin time at the hands of the North-men, both Danes and Vikings. The latter conquered the Orkneys and Shetland Islands, the Hebrides and the northern part of the mainland. They then struck at the Firth of Clyde and took Dumbarton (the name means “fortress of the Britons”), the capital of Strathclyde. Its capital now moved to Carlisle, so that the western Borderlands assumed a new importance.

It was about this time, according to the early Scottish chronicler Fordun, that a great military leader arose in southern Scotland in the person of Grig (or Gregor) the Great.* He seems to have been rather a legendary character, roughly contemporary with Alfred the Great in England ; and just as

* Burton in his “History of Scotland” dismisses Gregor’s claim to fame with contempt, nor is he mentioned by Hume Brown in his “Short History.” Yet Curwen’s History of Cumberland gives him some prominence.

Alfred withstood and defeated the Danes in the south, so Gregor is said to have fought the Norse with vigour and enterprise, so much so that the Cumbrians are reputed to have turned to him for help against the North-men, and possibly too against the southern English.

Gregor the Great died in 893, and the next kings of Scotland were Donal IV and Constantine III. The latter made his own brother (or cousin), another Donal, king of Strathclyde. A little later, this Donal's son, Eugenius (Owen) is referred to by both Scottish and English chroniclers as "King of Cumbria." Thus a new kingdom comes into being at the western end of the Borderlands, that of an enlarged Cumbria formed by the union of Strathclyde, Galloway and the "Land of Carlisle."

The policy of Alfred's son and grandson, respectively Edward the Elder and Athelstan, was to expand northwards and to try to bring the Border kingdoms, and even the Scots, under their sway. In 924 Edward the Elder was acknowledged by the Northumbrians, the Cumbrians and the Scots to be "their father and lord." To this act of homage, called the "Commendation of Scotland," the great historian, Professor Freeman, traces Edward I's claim, entered some 370 years after the event, to receive homage from the Scottish king. With what dire results we know too well! The agreement was really valueless from the start, more honoured in the breach than in the observance. Within two years the North broke out against the West Saxons and Athelstan marched against a combined force of Northumbrians, Scots and Cumbrians: they met at Dacre Castle, above Ullswater, and Athelstan enforced peace on the northern princes, stipulating that they should renew their allegiance to him.

The "Peace of Dacre" was soon afterwards broken by the Scots and Athelstan took punitive action against them. His outstanding military achievement was his complete victory in 937 at *Brunanburh* (which has been variously located at Bromborough in Cheshire, or in Lancashire, according to Dr. Nielson, at Burnswark near Ecclefechan) against the "Great

Confederation " of the Irish Danes, the Northumbrian Danes, the Strathclyders (including Cumbrians) under Eugenius, and the Scots under Constantine. The main result, so far as Border history is concerned, was that the northern princes did homage to Athelstan, who once more became, at least nominally, overlord of all Britain. But the really significant fact about these events of the early 10th century was that there was now a definite *rapprochement* between Northumbrians and Scots and also between Northumbrians and Cumbrians. The " Great Confederation of the North " had come into being under pressure from the aggressive designs of West Saxon kings : thus a clear-cut division between North and South begins to emerge, for the first time since the days of the Roman occupation.

Under the next two English (Wessex) kings, Edmund and Eldred, there was a shift of policy, from aggression to conciliation in their relations with the Scots. Edmund, after suppressing a rising in Northumbria, turned westwards and overran Cumbria and then, in order to secure the support of the Scottish king Malcolm, granted him this territory as a fief on condition that " he should be his faithful friend and follower." It was a curious transaction, for Cumbria, which as we have seen was a member of the ancient kingdom of Strathclyde, had never been, and even now was not, technically incorporated into England : yet an English king handed it over as a fief to a neighbouring monarch.

Under Eldred the Northumbrian Danes rebelled again, proclaiming a son of the king of Norway as their own independent ruler. Eldred having quelled the rising, divided Northumbria into three districts. Two of them were under the administration of English *ealdormen*, or *jarls* (earls) as the Danes called them ; while the third portion, the Lothians, was made over to the Scottish king Kenneth. Thus the policy of befriending the Scots was given fresh impetus. Possibly, too, the English king aimed at containing the fractious Danish

element in the north-east of England between an upper and a nether millstone.

Some years later, after Canute the Dane had succeeded Edmund Ironside as King of England in 1016, the Northumbrians tried to recover the Lothians from the Scots but were decisively defeated by Malcolm II at the Battle of Carham, 1018. From now on the eastern end of the boundary between England and Scotland remained fixed on the line of the Tweed : half the Border Line had been born, so to speak.

Siward (Sigurd) is perhaps the best-known of the Anglo-Danish earls of Northumberland.* He was sent by Edward the Confessor on a memorable expedition into Scotland, to drive out Macbeth and to restore the kingdom to Malcolm (Canmore), son of the murdered Duncan. This Malcolm had been Underking, or Prince, of Cumbria.

Another Anglo-Danish earl was Gospatrick, who about 1070, invaded and seized the Land of Carlisle. According to a Durham Cathedral chronicler, he did this in revenge for a devastating raid by the Scots into Teesdale. Evidently there was only an uneasy peace between England and Scotland, despite their earlier alliances and despite Edmund's and Eldred's attempts at appeasement. Shortly after this episode Gospatrick himself was driven from his earldom by the advancing Normans and, strange as it may seem, he sought refuge at the Scottish king's court ; but at the time he managed to put his son Dolfin in possession of the Land of Carlisle, which he had so recently wrenched from Malcolm Canmore.

With the NORMAN CONQUEST we enter the last phase of this historical survey. William the Conqueror never attempted to subdue Westmorland and Cumberland, but his son, William Rufus, in 1092, led a large force of Norman barons and knights to the north and captured Carlisle from Dolfin. He repaired the city's defences (which had suffered considerably at the hands of the Danes and Norsemen during

* *Northumberland* seems a more appropriate name to use for the region of Northumbria lying south of the Tweed.

the previous two centuries) and established a garrison there. Now, for the first time, Cumbria was formally incorporated into the kingdom of England ; and furthermore the line of the Western Marches was laid down roughly in the form it has today.

In Henry I's reign, the Land of Carlisle was elevated into an earldom, and this again was divided into three baronies for the defence of the Border. Those of Liddell (or Lyddale) and Gilsland, in the north and north-east of the county, were to guard against land attacks by the Scots ; while the barony of Burgh (by-Sands) to the west of Carlisle protected the flank against sea invasion across the Solway.

It was Henry I, too, who first gave Cumberland its own bishopric. Northumberland had had its two bishops, of Hexham and Lindisfarne, as early as the days of St. Cuthbert ; but eventually, owing to the havoc wrought by the Danes, they had become absorbed into the powerful diocese of Durham. Cumberland, however, so long as it was part of Strathclyde, presumably remained under the jurisdiction of the Bishops of Glasgow or of Galloway. It was only in 1133 that it obtained a diocese of its own. In this connection it is worth noting that in 1169, the see of Carlisle being then vacant, the newly-built Priory of Lanercost was dedicated by Bishop Christian from *Casa Candida* (Whithorn). So the old ties were not entirely forgotten.

Henry I married the Scottish princess Matilda, a daughter of Malcolm Canmore and his saintly queen, Margaret. After Henry's death the succession to the English throne was disputed between his nephew, Stephen of Blois, and his daughter, the Empress Maud, so called because her first husband had been the Holy Roman Emperor Henry V. Subsequently she had married Geoffrey Plantagenet, Count of Anjou, by whom she became the mother of the future Henry II, first of the Plantagenet kings.

Stephen's and Maud's claims and counter-claims to the throne led to a bitter civil war, in which the Scottish king,

David I, rather naturally ranged himself on the side of his niece. In fact, he invaded England in her support but was defeated at Northallerton in the "Battle of the Standard" (1138). Nevertheless Stephen must have been afraid of further Scottish attacks and so, to placate David, he gave Cumberland back to him. King David proceeded to hold court at Carlisle and to appoint his son, Henry, as Prince of Cumberland.

David died in 1153, Stephen in 1154, and in the latter year Henry of Anjou came to the throne of England as Henry II. Within two or three years he had re-annexed Cumberland and re-established the line of the Western Marches. Established is perhaps rather too strong a word when we remember the "Debatable Land"—between the river Sark on the one hand and the Border Esk and Lower Liddesdale on the other—and how that part of the country was a constant bone of contention between the two kindgoms.

With Henry II's reconquest of Cumberland we come to the end of the chapter dealing with the evolution of the Border Line as a political frontier. I stress the word *political*: for, as I have endeavoured to show, there was no proper ethnological demarcation between northern England and southern Scotland. Rather there was, or had been, a racial division between east and west. On the east there were, from the 5th century onwards, first the Angles, with later on a great influx of Danes, peopling the whole region from the Forth to the Tyne, and even to the Humber; while on the west side the inhabitants from the Firth of Clyde to the Mersey were primarily Britons, on to which Norse and Danish stock was afterwards grafted. Where then, in those distant days, was the distinction between Sawney and Sassenach? Certainly not on the Border: you would have to go north of the Forth-Clyde line to find the true Scots.

Similarly in the matter of language there was no division between Northumberland and south-east Scotland: the whole area was English-speaking from the time of the Anglo-Saxon conquest. In the western Borderlands, the peoples of Cumbria

and south-west Scotland were Welsh-speaking. In the paper on "Place-Names in the Border Country," which appeared in last year's *History* (Vol. XXXVI,1), I pointed out that linguistic ties between north and south on the one hand, and on the other hand linguistic differences between east and west, are reflected in place-names as a whole.

FEUDAL AND FAMILY LINKS ACROSS THE BORDER

Even after the Border had become a geographical fact, the local magnates on either side knew little of *national* patriotism—unless it suited them ! Indeed they often engaged in traitorous activities and could be rankly disloyal to their respective lawful sovereigns. The Percys in England are a case in point ; and in Scotland we have the instance of the Douglasses being deprived of Hermitage Castle because James IV suspected them of furtive dealings with the English. The Border lords were much more bound by territorial and family ties than by national loyalty, and self-interest doubtless played a leading part in their code of behaviour. The English lived under a highly-organised Feudal System (introduced by the Normans), in which wealth and political power were equated with the tenure of a great number of lordships and manors, and this bred an insatiable land-hunger. The Scots too were hungry, but in a different way. They hankered after the more fertile lands south of the Cheviots because these produced fatter cattle and better crops than did the rugged uplands of southern Scotland. There were also rich abbeys and churches to be despoiled for the sake of their well-filled tithe-barns and their treasures of gold and silver ornaments. In fairness I should add that rich abbeys were equally attractive to the English. Another element common to English and Scottish was, I suspect, sheer blood-lust, for those were barbarous days. Not to put too fine a point on it, the Borderers were a rapacious and bloodthirsty set of brigands and bandits.

I should also mention the many feudal family links that persisted between England and Scotland for several centuries,

despite the ever-recurring Border wars and "commando raids." In Norman and Plantagenet times there was a considerable two-way traffic in feudal holdings and this laid down a number of bridges across the Border—though pontoons might be the better word because of their impermanent character.

The Anglo-Danish Gospatrick, Earl of Northumberland, who fled from the Normans to the court of Malcolm Canmore, received numerous grants of land from the Scottish king. Not only was he the ancestor of the Scottish Earls of Dunbar and March, but it was possibly a collateral descendant of his who married the heiress of Raby (Co. Durham) and thus became the ancestor of one of the most powerful baronial families in England, the Nevilles. Among its members was the eponymous victor of the battle of Neville's Cross and, a century later, Warwick the King-maker.

Then there was Ketel, lord of Leitholm, who was probably a kinsman of the house of Dunbar and who was granted the manor of Great Strickland in Westmorland. The ultimate heiress of Leitholm was the great-grandmother of William de Strickland, who married the heiress of Sizergh, near Kendal; and Sizergh Castle has remained in the possession of the Stricklands, themselves descended from the De Lethams, until in recent years it was made over to the National Trust.

A younger brother of William the Lion, King of Scotland, received the earldom of Huntingdon from the English king, and he further increased his territorial stake in England by marrying a daughter of the Earl of Chester. One of their daughters married Henry Hastings and the present family of Hastings, Earls of Huntingdon, are among their descendants. Lord Hastings, whose family name is Astley, and whose beautiful Vanbrugh house at Seaton Delaval we visited a few years ago, can also claim descent in the female line (many times over) from this same Scottish prince who became an English earl.

On the other side of the coin, we find Anglo-Norman families

holding lands in Scotland. Such were the De Soulis, lords of Hermitage and Liddell Castle (above Newcastleton). Lower Liddesdale was the preserve of the Armstrongs, whose name was originally Forthinbraes, which became anglicised to Strong i' th' Arm or Armstrong. The Elliots, a little higher up Liddesdale, were originally Elwolds—a name which seems to be of Anglo-Saxon or Scandinavian derivation.

Some of the most renowned personalities in Scottish history came of English, or at least Anglo-Norman stock. The Balliols were lords of Tyndale and had their seat at Bywell in Northumberland. The founder of Balliol College, Oxford, married Devorguila, a grand-daughter of David Earl of Huntingdon—hence their son, a younger John's claim to the throne of Scotland.

Another "claimant" was John Comyn, "the Black." He was almost certainly a descendant of one of William the Conqueror's lieges, Robert de Comines, from the town of that name in northern France.

The most revealing case is that of the Bruces, than whom there were no more fervent Scottish patriots. Yet they were not Scots, in the true sense of the word: for the first Bruce, then spelt *Brus*, was a "noble knight of Normandy" who came over with the Conqueror. He was granted no less than ninety-four manors and lordships in Yorkshire. His son, Robert, received from King David of Scotland the whole of Strathannan in Dumfriesshire, from the Border Esk in the east to Nithsdale in the west. He built Lochmaben Castle. But he still preserved his connection with Yorkshire and founded Guisborough Abbey in the North Riding, where eventually he was buried. Fourth in descent from him came Robert Bruce, claimant to the throne of Scotland through his mother, who again was a daughter of the Earl of Huntingdon. Two generations later we have the great Robert The Bruce, who was crowned King of Scotland at Scone in 1306.

Once more we must ask ourselves: How and where are we to draw the line between English and Scot?

I think I cannot do better than conclude with two quotations. Unfortunately I do not know their authorship, but from the context in which they appeared it is possible that the second may be attributed to James V of Scotland. The other seems to come from an English source, but it apparently dates from the same period, the 16th century. Here it is :

“And as for Scottishemen and Englishemen (they) be not enemyes by nature but by custome ; not by our good will, but by theyr own follye : which would take more honour in being coupled to England than we should take profite in being joyned to Scotlande . . .”

And this may have been written by James V :

“ . . . One God, one faythe, one compasse of the see, one lande and countrie, one tungue in speakynge, one maner and trade in livynge, like courage and stomake in war, lyke quicknesse of witte to learning, hath made Englande and Scotlande bothe one . . .”

SECRETARY'S NOTES

As most of the places visited have been given full reports in the 'History,' it would seem superfluous to add any further data to that already printed.

The Club was very anxious about the health of the Treasurer, Mr. Martin Jamieson, and is exceedingly glad to see him restored to health. His work, though unseen, is enormous, and we are indeed grateful for all his efforts.

The loss of the oldest member of the Club, Miss Helen Brown, of Longformacus, is one which has been felt by the entire county. It was ever a joy to visit her, and her knowledge of nature and of the countryside was outstanding.

The Club has sustained its usual number of resignations, but this evens itself out by the new members, to whom we wish much future enjoyment through the facilities of the Club.

The Secretary wishes again to emphasise the importance of the 'History' and its valuable records, not only of archaeological interest, but of scientific importance. The 'History' is recognised as one of the leading publications of its kind in the world. This is something of which to be proud.

We are pleased to ally ourselves with the newly formed 'Scottish Wild Life Trust' and its Tweed Valley branch. The 'Trust' in co-operation with the Nature Conservancy Groups is able to do a great deal in the preservation of the natural resources. It is hoped that many members of the Club will join this extremely important body and so play a part in the protection not only of the wild life but of the natural beauties of Tweed valley.

Once again the Secretary wishes to thank the President, Miss Donaldson-Hudson, the Council, and the members of the Club who have never failed to give him every support and encouragement. Their good humour and tolerance are ever an inspiration.

OBITUARY

Miss H. M. BROWN

The death of Miss Helen Brown, of Longformacus House, on December 15th, 1964, a few weeks before her ninetieth birthday, will have occasioned great sadness to her large circle of friends and acquaintances on the Borders, and not least to the members of the Berwickshire Naturalists' Club, of which she was the *doyenne*, having been elected an Honorary Life Member in 1893.

There are many who had known Miss Brown far longer than I, but during the years I lived in Longformacus I was in close and frequent contact with her and came to know her extremely well. I feel therefore not unqualified to pay tribute to her memory. (Nor should I forget that she originally proposed me for membership of the Club).

She was an exceptional woman in so many ways, remarkable for the qualities of her heart and mind. She had an extraordinarily clear intellect—no vague or muddled thinking in her make-up—which made her a most delightful and stimulating companion. Widely travelled, very well-read, and endowed with a wonderful memory, there was no topic you could not discuss with her. And always it was *you* who gained immeasurably from all she had to give out from her fund of knowledge and wise experience. It was *you* and your activities that interested her and she spoke little about herself.

The qualities of her heart were perhaps less evident and less easy to define. She was certainly far from being aloof or detached from humanity, as is sometimes the case with "intellectuals," for she was so intensely interested in her fellow-beings. She radiated kindness, and she had a great affection for children. She was above all a woman of deep religious convictions: when asked if she believed in an after-life she replied, simply and sincerely, "Add the Collect for the 2nd Sunday in Advent to your daily prayers."

Not the least of her endearing traits were her little personal idiosyncracies, such as her distaste for certain fruits and

flowers because of their colour. During the war she compiled her own cookery book, "Cooking for One"; a friend who had been bidden to luncheon was mildly surprised but vastly amused to be fed on melon stuffed with porridge. The same friend, on another occasion, drove her down to Sussex where she went in search of the rare Spider Orchis in the vicinity of Beachy Head. Having sought and found it she threw her walking stick in the air and danced a jig for sheer joy!

She took a lively interest in her estate, her farms and woodlands, and in her garden which was full of unusual plants. Her unflagging zeal for finding and identifying wild flowers led her, as often as not, to take her holidays in localities little known perhaps for their scenic or other amenities, but where rare plants were known to exist. She was also knowledgeable about birds and bee-keeping.

She was indeed a woman of great character, a character of so many delightful facets, and our world is the poorer for her death. Although she belonged to a now almost-vanished generation, yet she kept in touch with the younger generations, with modern thought and modern conditions, and her friends of all ages will lament her loss but cherish her memory.

Ruth Donaldson-Hudson.

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

The 126th Meeting of the British Association for the Advancement of Science was held in Southampton in late August and early September, 1964.

The City of Southampton gives one the impression of a dual personality. To pass a week in this city is to discover a wealth of historic interest not even guessed at by the crowds who arrive and depart from the busy docks. The Romans had a great fortress in the near neighbourhood called Clausentium—then the Saxons, in the 6th century, had a settlement near the Church of St. Mary's. The Danes raided the town in 1017-1035. Situated in the main street is the Bargate; this historic building was erected in early Norman times. The city walls at this time were gradually extended until they encircled Southampton, being, we learned, about one mile and a quarter in circumference.

The Bargate is truly the gateway of history from medieval times. St. Michael's Square and Church was the scene of one of the most disastrous events in Southampton's long history—this was the French raid in 1338. French pirates reached the town under a dense cover of mist on October 4th on a Sunday morning—they rushed up Bugle Street from 'the hard' where they had landed, burst into St. Michael's Church, killing men women, and children, as the poor souls knelt at prayer. The townsfolk tried to withstand the frightful slaughter, but the pirates looted and burned the town. Next morning, help arrived from the surrounding countryside, and after a terrible battle the raiders were driven from the town. Thereafter, Edward III. ordered strengthening of the walls and defences all along the western front, where they remain to this day.

It is a city of many contrasts: the beautiful Guildhall stands in all its splendour, dominating the surrounding neighbourhood. The many fine parks with their lovely flowers and stately trees enchanse this city of medieval and modern times. Truly it can be said, out of the ashes, the

result of a devastating war, Southampton has arisen in renewed attraction. One realises the courage and determination of its citizens that has made this possible. Recently, Elizabeth II. conferred the title of City on the town, because of the gallant behaviour of the people of Southampton in World War II.

In the above mentioned Guildhall the inaugural meeting took place. The proceedings commenced by the conferment of Honorary Degrees.

The Mayor thereafter in a very graceful speech, welcomed the British Association to the City and invited Lord Brain, the President, to deliver his address entitled "Science and Behaviour."

The President commenced his address by saying "In choosing to talk to you about Science and Behaviour, I have several objects in view. The primary one, of course, is to fulfil the aim of the Association, *i.e.*, to bring some facts before a wider public than would normally hear of them." Continuing, he went on, "this at once raises a problem as science becomes increasingly specialised it seems to me that two kinds of communications are required. First, is the obvious need of informing people of what is going on in the scientific world at large." Lord Brain then said that two kinds of scientific communication are required. Second, people should be told what is going on in particular sciences. many being related to one another. By behaviour the President went on to say that he meant the reactions of many animal organisms to their environment. "As human beings" Lord Brain said, "we are increasingly occupied with problems arising out of our behaviour." He said, we need to look no further than the addresses of his Presidential predecessors during the last decade to illustrate this. "Not unnaturally," he continued, "we tend to interpret human behaviour altogether in human terms." In the course of his address the President said that "one of the characteristics of western culture for many centuries has been the stress laid upon individual man." He said "that until recently the moulding influence of man's social environment upon him has been on the whole neglected, and if this influence is neglected we shall fail to understand

most of his behaviour, but also lose the opportunity of influencing him." The President continued by saying, "I have left to the end the most difficult question of all. We are learning every year more about the nature of matter, the relationships between events and the observer, between the brain and the mind."

The President closed his most able, interesting and learned address by the following remarks. He said "one of the overwhelming examples of our failure to predict and prepare for the consequences of scientific development has been population growth. The results of discoveries of science and technology for the benefit of mankind as a whole are inconceivably great, but," he said, "our preparations which we are making for their use and development are pitifully small." Lord Brain concluded, "Now thanks to the energy of a few people, chiefly in this country and the United States, it is fairly generally recognised that there is a very serious population problem and that the world population will have doubled from three thousand million to six thousand million by the year 2,000. This of course, is partly the result of widespread improvements in medicine and hygiene and their life-saving consequences. "The task," the President said, "is to raise the standard of living for twice the present number, in forty years. This challenge now faces the scientists. In the remaining years of the century it will be interesting to learn how the scientists of the world tackle this gigantic problem."

The *Conference of Delegates of the Corresponding Societies of Britain* met under the Chairmanship of Dr. D. A. Allan, C.B.E., in the Arts building of the University. Dr. Allan took as his theme the place of the museum in the work of the Societies. Mr. A. G. Bourne, the Honorary Secretary of the Committee, spoke for more co-operation between the museums and local societies during National Nature Week.

Thereafter there was a general discussion.

In the Archaeological Section 4, Dr. C. A. Raleigh Radford, F.B.A., member of the Royal Commission on Historical Monuments for England, gave a most interesting address, entitled *Archaeology and History*. In the course of his lecture,

I learned that the wealth of historical matter was inspired directly or indirectly by the Christian Church. We were told that lives of the Saints at times include descriptions of individual Churches. Hexham and Winchester, he said, were outstanding examples. Hexham has long been a subject of controversy. There were excavations carried out in the early years of the century, before the building of the nave. The result, he said, of this work was evidently unsatisfactory.

Winchester, the second church mentioned, has an obscure history. The excavations began by Martin Biddle, Dr. Radford remarked, may well provide the missing archaeological data and demonstrate the value of combined operations in the field of historical research.

An interesting point, was emphasised during this lecture. At Yeavering, Northumberland, a series of wooden buildings occupied, we were told, in the late sixth and early seventh centuries have been identified as the site "Adgreffin" where Bede records that St. Paulinus preached to the Northumbrians in the year 627. The whole of this site was dominated by an irregular fort strongly pallisaded and this evidently served the surrounding inhabitants as a place of refuge in time of need. The lecturer, ended his address by a plea for full co-operation and understanding between those working on the remains and those studying all types of written records.

Section X, *i.e.*, (Corresponding Societies) had their usual excursion preceded by a lunch party. The outing which followed was most instructive and enjoyable. We were conveyed by coach to Buckler's Hard, situated on the Beaulieu River, Hants. The Beaulieu rises near Lynhurst and wends its way into the Solent. This river is quite unique in Britain for its bed is privately owned. This situation arises from a grant by King John to the Cistercian Monks of Beaulieu in 1204. These rights were acquired by Thomas Wrottesley, later created 1st Earl of Southampton. To-day, as a direct descendent of the 1st Earl, Lord Montague of Beaulieu is the legal heir. Round a bend in the river we came to the Agamemnon Boat-yard founded in 1947. This yard stands on a historic site, for here were the four launchways of the 18th century

shipyard of Henry Adams, the builder of Nelson's favourite ship, the 64 gun H.M.S. *Agamemnon*. There is in this little village a most interesting museum full of models of boats famous in the history of our country. John, Duke of Montague (1689-1749) son-in-law of Sarah, Duchess of Marlborough, was a genius. He was the founder of Buckler's Hard.

Next came a day's sail to the Isle of Wight. We toured by motor coach round the Island and on the way we visited Carisbrooke Castle. Passing through the gateway, we noticed the initials of Queen Elizabeth I, 1587. The well-house interested us very much. There a gigantic wooden wheel brought the water up ; the motive power being supplied by a tiny donkey. It was most intriguing to watch the small animal looking neither to right or left, walking backwards and forwards very slowly with such a disdainful look. As soon as the bucket of water appeared from the depth below, the funny little fellow walked off, and the bucketful of water disappeared again to the almost bottomless depth hewn out of the solid rock.

We learned that King Charles I. was imprisoned in this Castle and the window he unsuccessfully tried to escape from was pointed out to us.

Sunday arrived all too quickly, and the usual pageantry and processions took place, when the scientists of the British Association entered the Church of St. Mary's. The Master of Selwyn College, Cambridge (Professor Owen Chadwick, F.B.A., D.D.) preached and his text was "I will make all my goodness pass before thee."

On the final day, I joined the archaeological party and some forty of us flew to the Channel Islands for four days. Our headquarters were at St. Helier, the capital of Jersey.

Next morning a coach awaited us and we were conveyed round the Island.

Our first stop was at Grosney and at Castle le Catel near a Carmel Chapel Le Couperon, a passage prehistoric burial place. Next day, we visited L'Quame for La Cotte, this turned out to be a Palaeolithic rock shelter.

On the Saturday after lunch we visited St. Laurence Church. This most interesting and historical building we found, was most beautifully decorated with the lovely flowers, fruit and vegetables of the Island, next day being their Harvest Festival Service.

Thereafter we visited La Hogue Bie, a prehistoric tomb, and two ancient chapels ; the later situated on the summit of huge earthworks.

The word "Hogue" is the old Norse, "Hangar," which means, "eminence" and is supposed to have been given to this huge mound which even to-day is some 40 feet high. The two chapels on the top have been destroyed and rebuilt, we were told, by succeeding owners, and are now owned by the Societe Jersiaise ; who are also the custodians of a group of monuments which we learned are without equal in Western Europe.

As we explored these prehistoric graves situated near the foot of the mound, we had almost to crawl through the long passage as we found it quite impossible to walk upright.

On the following day we visited Faldouet Dolmen and the immense Castle situated high above the harbour.

On January 8th, 1965, I proceeded to London and attended the Committee Meeting of the British Corresponding Societies at Birkbeck College, London University, on which Committee I represent the Berwickshire Naturalists. There the minutes of the previous meeting were read and arrangements for the 1965 Conference to be held in Cambridge were carried through. A discussion was held regarding Speakers on "Power and Amenity." It was suggested that a speaker from the Central Electricity Generating Board should be invited to put forward the Board's point of view, and that a speaker from the Amenity body concerned with this problem should be invited to give their aspect at Cambridge.

The Committee agreed to this and Mr. Bourne was empowered to invite speakers on the Committee's behalf.

One member thought the Naturalist was being over-catered for and that thereby the other sciences might in consequence

be neglected. It was thought that Science should be catered for with a capital S.

Once again I thank the Members of our Naturalist Club for the privilege of representing them at The British Association Conferences.

Margaret Hewat McWhir.

HOLY ISLAND HONOURED

By the recent grant of a Coat of Arms to the Parish Council by the Kings of Arms Holy Island has become one of the smallest local authorities to be so honoured.

The grant consists of a shield bearing barry wavy silver and blue on a pomeis ensigned with an ancient crown, a celtic cross gold with a chief, also blue and bearing a landscape representation of the ruins of the priory proper, and above the shield for a crest a monk seated looking to the front wearing a saffron coloured robe proper, behind the head a nimbus gold, and holding in the hands an open book red garnished gold.

It is understood that a representation of the Arms is to be erected on the causeway to the island.

C. J. D.-J.

THOCKRINGTON CHURCH

By R. DONALDSON-HUDSON, B.A., F.R.Hist.S.

The Parish, roughly 4 miles from north to south and $2\frac{1}{2}$ miles (at its widest) from east to west, covers 2,451 acres of grazing and pastureland in southern Northumberland, far removed from crowded main roads and large centres of population. Indeed, it must have the smallest population (70) of almost any parish in the kingdom : just below the church are a farm and some three or four cottages, while the rest of the inhabitants are grouped around three scattered homesteads some distance away.

During most of the 19th century, population figures varied round about 50. The peak was reached in 1831 with 71 souls ; in 1845 the parish was ravaged by cholera, which led to the abandonment of the little village lying just north of the churchyard ; by 1891 the inhabitants numbered 35.

HISTORY

The Township and Church of Thockrington were originally owned by the powerful Norman family of Umfraville, lords of Redesdale and of Prudhoe. Early in the 13th century Richard de Umfraville surrendered his rights here to the Church at York, in compensation for his men having caused damage and annoyance to the Priory of Hexham and to the Archbishop's land. The Deed of Gift to the Archbishop was addressed to the free tenants of Thockrington, among who were the Brethren of St. John of Jerusalem (whose grazing rights were the subject of a legal dispute in the reign of Edward I). Archbishop Gray immediately assigned the revenues of Thockrington as an endowment for a prebend in York Minster. To guard against later dispute he obtained a confirmation from the Bishop of Durham, also the resignation from the benefice of the last rector of the parish, and finally in 1226 a papal licence from Honorius II.

Thus Thockrington became a "prebendal peculiar" of the Archbishop of York, within his diocese although, like Hexhamshire, in Northumberland, the remainder of which was in the

see of Durham. Whereas the parishes of Hexhamshire were governed by a commissary with jurisdiction over that district, the prebendary of Thockrington had all the powers of a diocesan court : of granting marriage licences, probates of wills and administration of estates, of holding courts of visitation and excommunication. Yet the Prebendary and his parish were subject to a diocesan, not a provincial, visitation by the Archbishop.

This appropriation of the church, "unique in the ecclesiastical annals of the county," lasted 625 years, until the death in 1851 of Sir Robert Affleck, last Prebendary of Thockrington. The emoluments then passed to the Ecclesiastical Commissioners, but it was not until 1865 that the tithe rent-charge of £134 9s. 8d., formerly belonging to the prebend, was made available to endow the curacy.

Among the Prebendaries were some high dignitaries of the Church, deans and archdeacons, some of whom were later to become bishops. From 1754 to 1788 the Prebendary was the Rev. Sir William Lowther, Bart., direct ancestor of the Earls of Lonsdale.

During all these centuries of prebendal rule, the parish was served—at least nominally—by grossly-underpaid curates whose miserable stipends had to be provided by the land-owners and tenants in the parish.

Of one minister, Taylor (c. 1660) it is recorded : "He forbore preaching for several years after being ejected (*i.e.* during Cromwellian times), but at length being under trouble of mind he returned again to his work."

In the 18th century there seems to have been considerable laxity in other directions. There are two instances of proceedings being taken, at Visitations, against a man and a woman for immorality. In both cases the parties concerned brought witnesses to prove that they had been married, though without banns or licence, in the one case in a private room and in the second case in a public house.

Mr. Brown, curate in 1851, at the time of Sir Robert Affleck's death, petitioned for an augmentation of his cure, which was worth £60 gross, net £50. Although the increase

was eventually granted, as mentioned above, the poor curate did not live long enough to get the benefit.

THE CHURCH

Dedicated to St. Aidan, it is said to be one of the oldest churches in Northumberland.

As in the case of Kirknewton, Old Bewick, Heddon, Warkworth and Seaton Delaval, the chancel is vaulted. An unusual feature is that it has an arch at the east end, over the altar, as well as at the western end. The suggestion is that the chancel originally ended in an apse. In the 13th century, however, a straight wall was built across the east end of the church, probably as the result of subsidence in the apse foundations, which would have stood on steeply-sloping ground.

The chancel walls, with its two arches, and the west wall of the nave—all of them 3 feet 6 inches thick—date from 1100 to 1150. At some time after the 13th century two buttresses were added at the east end, set diagonally at the corners. The west wall was also reinforced on the outside, with a strong buttress added in the middle. This may possibly cover a Norman window in that face.

The chancel windows, north and south, are said to be the original Norman structures. While the openings are wide on the inside, they are very narrow on the outside. Although this may have been due to considerations of defence, one cannot help wondering whether the 12th century Norman church did not replace an earlier edifice. The narrow chancel windows and the apsidal east end are reminiscent of Saxon building ; so too is the low, square-headed priest's door in the south wall of the chancel, of which the blocked-up remains can be seen on the outside. The dedication to St. Aidan, the apostle of Anglian Northumbria, may be another pointer in that direction.

The double bell-cote on top of the west gable is of rather unusual design, and is apparently built of ancient re-used masonry.

About 1769, the main walls, north and south, of the nave were rebuilt. They are only 2 feet thick, as against the 3 feet

6 inch walls of the chancel. The vestry was added in 1864 and the porch in 1873.

The Font is ancient, but impossible to date exactly.

SEPULCHRAL SLABS AND MONUMENTS

Inside the church, against the west wall of the nave :

1. Sepulchral Slab with effigy of a woman, her head resting on a cushion. She wears a wimple and a curious square head covering. Over a close-fitting gown she wears a mantle fastened by a cord across the breast. Her left hand clasps this cord, while in her right hand she gathers up the left side of the mantle.

2. Sepulchral Slab of a Warrior Priest, bearing a cross, the head of which is formed of four circles strapped together with a book on the dexter side and a sword on the sinister side of the cross.

On the floor of the Chancel :

3. Grave cover with inscription to various members of the Shafto family of Bavington (they were lords of the manor from the mid-16th century), dating from 1782 to 1833. The top end of this stone is hidden by the step at the communion rails.

Outside the east end of the church :

4. Slab incised with a sword and bugle (forester's badge).

5. Broken fragments of a limestone slab, late 13th century, with inscription in Lombardic characters : “ (Hic ja) cet Vilelmus Fossour et Ma(rga)retta uxor ipsiu(s) Orate pro eis ”. There is also one of a pair of matrices for brass inlaid heads. Except for the difference in names, this inscription is exactly similar to that on an Errington tomb at the church of St. John Lee near Hexham.

Standing by the S.-E. buttress is a fairly recent gravestone with a charming inscription to a shepherd “ of exemplary piety . . . ” There are also the graves of two Presbyterian ministers of Bavington (175 . . and 1852).

In the graveyard on the south side of the church are Shafto monuments and also the base of the old churchyard Cross.

KIRKANDREWS CHURCH

By The Rev. J. T. R. STEELE, Rector

The Parish of Kirkandrews on Esk was first established in 1632, prior to which it had formed part of the extensive Parish of Arthuret*, by Longtown. A further subdivision took place in 1746, when most of that part of Kirkandrews lying east of the Esk and Liddel, was cut off to constitute the Parish of Nicholforest. All that remains now to Kirkandrews across the river is the "Mote Quarter," a small enclave around Liddel Strength (the "Mote"). On the west side of Esk, the parish includes the whole of the English portion of the Debatable Land, bounded on the north by Scots Dike, on the west by the river Sark, and on the south by the Solway.

The first church was built in 1635 on the site of a ruined chapel, which was presumably a relic of the Scottish "Occupation." Presumably too, this chapel had been dedicated to St. Andrew, as is the Parish Church. The church was rebuilt in 1685; extensive repairs had to be carried out in 1739; and further serious damage was done in a hurricane in March, 1750. Consequently the old church had to be demolished, and a new one was built on a slightly different site and with a new alignment from north to south, instead of the conventional east-west line. The architect for this new building was none other than the notable civil engineer, Thomas Telford, the son of a Dumfriesshire shepherd.

His church, completed in 1776, required no major work on its fabric until 1893, when the building was restored and redecorated in the Italian style by an architect from London, Temple Moore, at a total cost of £1,850. The result is a beautiful example of work in the Renaissance style, all the more remarkable for being so unexpected in a little country church set in the middle of fields beside the Border Esk.

* Arthuret itself was an offshoot of the more ancient parish of Easton, where there was a place of worship served by the monks of Jedburgh. The last mention of a rector of Easton was in 1384. No trace remains of the Church.

The organ (by Messrs. Browns of Deal) dates from the 1893 restoration.

Other points of interest are the fine red sandstone font with an elaborately-carved oak cover, and the panelling on the walls of the nave made from the backs of the old pews.

The altar-piece in the apsidal, north end of the chancel, is a copy of Raphael's "Transfiguration." There are four stained glass windows of good quality in the nave, and a fifth, depicting the church with the Esk in the foreground and swans flying low over the water, in the gallery at the south end.

Outside we may notice the bell-turret, consisting of a dome on ten slender columns. The bell was added in 1830. The sun-dial over the entrance was given as a thank-offering for the safe return of Sir Fergus Graham and his brother from the Great War, 1914-18.

Since 1877 a suspension bridge, 95 yards long, has given access to the church for people coming on foot from the Netherby side. Before that church-goers had to cross the river by boat (wedding parties and funerals would usually have to go some five miles round by road, by the bridge at Longtown) and a chain ending in a ring, probably used for mooring the boat, is still visible among the trees lining the bank.

THE DEBATABLE LAND

By Miss R. DONALDSON-HUDSON, B.A., F.R.Hist.S.

This part of the Western Marches at one time played an important part in the history of Border relations between England and Scotland. In extent, it covered some ten miles from Tarras Moss and Bruntshiel Moor, in the north, to the estuary of the Esk in the south, and three to four miles in breadth, from the Sark on the west, to the Esk and lower Liddell in the west.

Up to, at least, the end of the 14th century it seems to have been accepted as part of Scotland. The name *Debatable Land* first occurs in 1450 when Cumberland claimed it, which led inevitably to Border clashes. A truce was arranged and the Scottish emissaries agreed that a proclamation should be made on their side of the Border, to the effect that all claimers and challengers to lands that were "Batable" or "Threpe" should undertake to be law-abiding and refrain from creating disturbances.

In 1451, 1453, and again in 1457, various agreements were made between England and Scotland, setting forth the rights of the respective kings and their subjects. These were quite valueless, for the allegiance of the inhabitants continued to be claimed by both parties, but rendered to none; the people became a law unto themselves, making incursions against their neighbours in England or Scotland, indiscriminately, according to whichever country offered the better prospects of pillage and loot.

Henry VII, in 1493, appointed a Commission to enquire into the boundaries of the Debatable Land, with special reference to the limits of the monastic lands of Canonbie. But the Commission achieved nothing and boundary disputes went on almost continuously, in spite of the threat of pains and penalties against those who broke the peace. William, Lord Dacre complained in a letter to Cardinal Wolsey (1528) of "cruell murther and shamfull slaughter" done upon his

servants " bicause that I woll not suffr the said Armstranges . . . to inhabit upon the Debatable grounds, or yet suffer them or any Scottisman of evill name or fame to com to Carlisle market." The objection to the Armstrongs inhabiting the Debatable Land refers to the custom, long recognised by English and Scots alike, that their cattle should be pastured on the land from sunrise to sunset but on condition of no building being erected on the ground. Whenever a building was set up, fighting was sure to break out as to the ownership of the land so occupied.

In 1543, Henry VIII demanded the possession of Canonbie Priory (St. Martin's), claiming that it had once belonged to England. In the same year came the first move in the direction of partitioning the Debatable Land between the two kingdoms. The Scots agreed in principle but insisted that " Canoybie fall hale to Scotland."

By 1550, the situation had become acute because the English Warden of the Marches claimed the whole area as part of his province. Lord Maxwell, the Scottish Warden, naturally resisted this demand—to concede it would have been to admit the validity of the English claim—and a stalemate was threatened. Wiser counsels, however, seem to have prevailed and a serious effort was made to settle the dispute once and for all. The region had become the refuge for all the outlaws and criminals from both sides of the Border who, after flight or expulsion from their own country, " thither repaired with their booty and often . . . induced their neighbours to be partakers of their crimes." This hornet's nest must first be cleared out before any settlement could be made. Wherefore, in 1551, the two opposing Lord Wardens, each on his side of the Border, caused it to be proclaimed that : "All Englishmen and Scottishmen, after this proclamation made, are and shall be free to rob, burn, spoil, slay, murder and destroy all and every such person or persons, their bodies, buildings, goods and cattle as do remain or shall inhabit upon any part of the said Debatable Land, without any redress to be made for same." Lord Maxwell, for his part, not only proclaimed but acted forcefully, overrunning the district later in the year and burning all its dwelling-places.

The ground having thus been swept clear, a Commission of two Englishmen (Lord Wharton and Sir Thomas Challoner) and two Scots (Sir James Douglas of Drumlanrig and Richard Maitland of Lethington) met on the spot, in 1552, to agree on a line of demarcation between the two kingdoms. Needless to say, agreement was not easily reached : the English pushed their claim too far north, the Scots advanced theirs too far south, to be to the liking of the other side. The French Ambassador, called in to arbitrate, wisely drew a line halfway between those proposed by the rival claimants. This line, marked by the Scots Dike from the Sark to the Esk " opposite the house of Fergus Greme," with a square stone set up at each end, bearing the arms of England on one side and the arms of Scotland on the other, has been the " frontier " between the two countries ever since. Not that it put a stop, as had been hoped, to Border raiding ; the Liddesdale reivers, still recognising no laws but their own, continued for nearly half a century to harry and molest their neighbours.

The Settlement of 1552 assigned to Scotland all the northern part of the old Debatable Land, *i.e.*, Canonbie and the rough moorland extending to Windy Edge, where Dumfriesshire marches with Roxburghshire. The English portion, reaching southwards to the shores of the Solway, included the whole Parish of Kirkandrews (originally in Scotland) and also part of the Parish of Morton, which lay at the western end of Scots Dike. The part of Morton remaining to Dumfriesshire, as the result of such an arbitrary division, is to this day called the Parish (and Church) of Half Morton.

SCOTS DIKE

To quote James Logan Mack, this " singularly interesting section of the Border Line " is the " most extensive portion of the boundary which has to set purpose been constructed by the hand of man."

It was fashioned by digging two parallel ditches and throwing the excavated soil into the intervening space, thus forming a long and continuous earth-mound of varying height. The distance between the ditches is also variable : in some stretches

they may be 9 feet, in others 30 feet, apart. From the main Carlisle-Langholm road to the banks of the Esk, the eastern end of the Dike degenerates into an ordinary ditch, and here one can stand with one foot in either kingdom.

For over three and a half centuries, that is until the First World War, Scots Dike retained all its essential features and, protected as it was by a plantation of forest trees, remained intact. In 1916, however, and in the ensuing years, the trees were progressively felled. The weight of the fallen tree trunks began the process of flattening the mound, and the subsequent haulage of fallen timber completed the destruction of an historic landmark. Only here and there may fragments of the earth-work remain or the line of a ditch be still visible.

THE FISH GARTH ON THE ESK

Border warfare is generally associated with family feuds, cattle stealing and indiscriminate plundering, but on the Esk salmon rights were no less a bone of contention. Salmon were a valuable and nutritious source of food for the local inhabitants, and as early as 1278 an assize in Carlisle had ordained, in view of the great destruction of salmon coming up to spawn and also of the young fry going down to the sea, that no netting should take place between Michaelmas and St. Andrew's Day and "that none fish in the above (Esk) or any other waters in the county, with nets, 'sterkilds' or other engine within said close time ; or without engine."

One of the bitterest and longest disputes between England and Scotland arose, about 1470, from the English inhabitants of lower Eskdale erecting a Fish Garth to trap the salmon going upstream. This evoked an immediate and hostile response from the Scottish riparian owners, among whom was doubtless the Prior of Canonbie, and they promptly demolished the obstruction.

From 1474 to 1494, during which period the garth was rebuilt once, only to be destroyed again, fruitless efforts were made to settle the dispute by appointing various commissions. Evidently the English were not able to sustain their case for,

in 1498, it was agreed that damage done to the Fish Garth was not a violation of the peace.

In the same year Thomas Lord Dacre had a grant from King James IV of "al and hale oure fisching of the water of Esk for the space and termes of thre yeris, with the right to erect Garths for a rent of four seine of salmond fisch ilk seine contenand xiiij fisch salmond."

The underlying cause of dissension persisted, however, prior to the Battle of Flodden, James IV was apparently prepared to meet the Earl of Surrey in single combat, the stakes being the removal of the Fish Garth and the restoration of Berwick to Scotland. "The said Earl thanked his Grace that he put him to so much honour, that he being a King anointed, would fight hand to hand with so poor a man as he, but . . . he would not deceive his Grace; for though he win him in battle, he was never the nearer Berwick nor the Fish Garths, for he had no such commission to do so." In other words, Henry VIII would not ratify the agreement, whatever the outcome of the combat might be.

For some years the alternate reconstruction and demolition of the Garth became the favourite pastime of English and Scots in this part of the Debatable Land. Eventually, after several abortive attempts, the problem was solved in 1543, though on what terms is not known.

Thereafter, for the next two and a half centuries, the "Salmon War" simmered down. But the temperature rose again, alarmingly, soon after the close of the American War (1775-1783), when Sir James Graham of Netherby built a cauld across the Esk. Sir Walter Scott refers to the incident in a Note to *Redgauntlet*: The new barrier at Netherby . . . and the right of erecting it being an international question of law between the sister Kingdoms, there was no court in either competent to its decision . . . The Scots people, assembled in numbers by signal of rocket-lights and rudely armed with fowling pieces, fish-spears, and such rustic weapons, marched to the banks of the river for the purpose of pulling down the dam-dike objected to. Sir James Graham armed many of his people . . . and had some military from Carlisle. A renewal of

the Border Wars had nearly taken place in the 18th century when prudence and moderation saved much tumult and perhaps some bloodshed. The English proprietor consented that a breach should be made in his dam-dike sufficient for the passage of the fish."

Close to the Fish Garth, on the very edge of the river stands a building known as the Coop House. It is believed to have been in some way connected with the salmon trap. Possibly it was a residence for those in charge of the fishings or it may have been the place to which the salmon were taken after being trapped.*

KIRKANDREWS TOWER

This Pele, belonging to the Grahams of Netherby, stands in a commanding position on the west bank of the Esk in that part of the Debatable Land that was eventually allotted to England. Half a mile to the north runs the line of the Scots Dike.

A tower was first built here in the 15th century, probably with the intention of guarding a ford over the Esk a short way downstream. In 1547 the Armstrongs destroyed this older tower, and the present building dates from the end of the 16th century or beginning of the 17th. Of all the fifty towers which, according to ancient records, once stood in Eskdale and Liddesdale, Kirkandrews is the only one to remain intact and inhabited.

Architecturally it is not unlike Hollows Tower, north of Canonbie, with corbelling below the parapet and a steeply-pitched roof with stepped gable-ends. But Kirkandrews has a rather distinctive feature, reminiscent of bastle-house construction, in the form of an outside staircase leading to the main entrance on the first floor. Beneath the stairs is an old door leading into a vaulted basement, which has huge boulders

* For these notes on the Debatable Land, the Scots Dike and the Fishgarth I have relied on W. J. Mack's great work, *The Border Line*, for which I make due acknowledgement; Miss Claudine Murray, who gave an admirable talk at our Meeting at Kirkandrews, has also been a valuable source of information.

for its foundations and walls five feet thick. One stone in the walls is said to be always damp, like the "Weeping Stone" in the dungeon of Carlisle Castle (which is worn smooth by having been licked by wretched prisoners seeking to quench their thirst).

Adjoining the tower is a walled courtyard which may represent the ancient barmkin within which the livestock was driven when an attack threatened. The entrance is under a Gothic arch with battlemented top, but this is of recent construction.

EXTRA MEETING—JUNE 24th, 1964
ROMAN REMAINS : WARDEN CHURCH
DILSTON CASTLE

This was a small gathering of about a dozen members and friends that met at Carrawburgh on the Roman Wall. Here we saw some very newly-exposed foundations of Roman (or Romano-British ?) buildings which were found under the projected site for a car park, just east of the main fort of *Procolitia*. Major W. A. Benson, who kindly gave us permission to wander at will over the site, was informed that the recent dig had revealed nothing of historical importance or archaeological value ; the car park will therefore be built as planned after details of the finds have been recorded. Some of the foundations are of unmistakable Roman workmanship, *i.e.*, the squared facing stones on each side of a central core of rubble. One building has a bifurcate drainage channel just below the floor level. Elsewhere much of the stonework is rough and untidy. Perhaps these out-buildings were part of the *vicus* or civilian settlement. Could one of them have been a "shop," such as is found at Housesteads ? Could they have been used and occupied in the Dark Ages, after the Romans had abandoned the Wall and its forts ?

Much more instructive were the remains of the Mithraeum, southwest of the fort. This was excavated and considerably, but faithfully, restored about twelve years ago. (A full description of the temple is given in the "Handbook to the Roman Wall.")

From Carrawburgh we proceeded west along the high road and turned off across fields to Milking Gap, some two miles beyond Housesteads. Here there is indeed a gap in Hadrian's Wall about half a mile long, between Highshields Crag (west) and Hotbank Farm (east). A modern dry-stone dyke roughly follows the course of the Wall, and the line of the forward ditch, or foss, is clearly seen. Opposite the farm-house we

could trace the outline of a milecastle (No. 38). From the farm we walked along the top of the Wall to the summit of Hotbank Crag and were rewarded with a magnificent view in all directions, from Great Cheviot in the north to Cross Fell in the south. We could also see the four loughs—Broomlee, Greenlee and Crag Loughs to the north of the Wall, Grindon Lough on the south side.

On the lower ground between Milking Gap and the *vallum* is an ancient British settlement with remains of stone hut-circles. Since pottery and other relics have shown that the site was occupied in Roman times, the inference is that it was established about the middle of the 2nd century A.D. when, under the Emperor Antoninus (successor to Hadrian), the frontier was pushed northwards to a line between Forth and Clyde. Had the Romans then been garrisoning Hadrian's Wall, it is hardly conceivable that they would have allowed a native settlement to grow up at their back door, so to speak, between Wall and *Vallum*.

Our next halt was at Hole Gap (between Common House on the main road and Cawfields Farm to the north), where we picnicked at Milecastle No. 42, and saw the work of excavating and re-conditioning the Wall now in progress along the ridge of the Whinsill that runs eastward from the milecastle. (See Vol. XXXVI, i, pp. 37 and 38, and illustration on an earlier page).

For part of the return journey we travelled along the ancient Stanegate, the road built by Agricola c. 80 A.D. We first struck it about a mile south of the "Twice Brewed," where the track led us across fields past Chesterholm (*Vindolanda*, see Vol. XXXVI, i, p. 36). Two of the Roman milestones are still standing by the wayside. After Chesterholm the modern highway follows the Stanegate almost exactly as far as Newbrough, where the church occupies the site of an Agricolan fort.

At the tiny village of Warden, in the triangle of land between the North and South Tynes, we saw St. Michael's Church, which was founded by St. Wilfrid about 663-4. It has a remarkably fine Saxon tower, mostly built of Roman stones.

The lintel-stones over the little narrow windows are shaped like the head of a cross, a feature of ecclesiastical building in the old Irish Church, from which the Celtic Church in Scotland derived, whence again Christianity was brought to Northumbria by Aidan. There are suggestions in the conformation of the ground that the graveyard was originally circular—another Celtic feature.

The old cross (mounted on a modern base), standing between the tower and the porch, is reputedly 7th century, Mrs. Curle, an authority on ancient crosses, thought that it, too, had affinities with Celtic rather than with Anglo-Saxon monuments.

The church is cruciform in plan, with the tower at the western end. The transepts are mainly original 12th century work, but with some restoration ; the chancel is entirely new, having been rebuilt in 1885 on the old foundations.

Within, the church is not of outstanding beauty—in fact, the nave is very plain with its bare plastered walls and its highly varnished yellowish-brown pews—but it has many interesting and pleasing features. Chief among these is the archway leading into the base of the tower, a very fine example of Anglo-Saxon masonry. In the chancel is an old gravestone of most uncommon design, being shaped like the long low gabled roof of a house. The bishop's chair in the sanctuary is of carved walnut, dating from Queen Anne's time. All the windows in the chancel and transepts are filled with stained glass by Kemp. They all show the artist's two predilections : for introducing castles into his landscapes, and for decorating with peacock's feathers the wings of his angels and archangel and even the winged beasts of the four evangelists.

Our tour concluded with a visit to Dilston Castle, on the south bank of the Tyne opposite Corbridge, once the home of the Radcliffes, Earls of Derwentwater.

The Lords of Dilston in Anglo-Norman times were the D'Eyvills, whose name is perpetuated in Dilston (formerly Dyvelston) and in Devil's Water, the lovely stream flowing just below the castle. Sir Thomas de Dyvelston, sheriff of Northumberland, built a castle here in the time of Edward III.

Later, the property seems to have passed into the hands of

the Cartingtons of Cartington, near Rothbury, for I find that about 1494 a Cartington heiress married a Radcliffe, from Cumberland. That family's Cumberland residence was on Lord's Island, in the middle of Lake Derwentwater, and the foundations of the old house can still be traced among the trees that cover the island.

Sir Francis Radcliffe, early in the 17th century, built a mansion-house on the site of the D'Eyville castle, then in a state of decay. A tower of the old castle, with "dungeons" in its basement and a pepper-pot turret on the battlements, was incorporated into the new house. Sir Francis' great-grandson, James, 3rd Earl of Derwentwater, whose mother was an illegitimate daughter of Charles II by Moll Davies, had grown up in France at the court of the exiled James II ; but by grace and favour of Queen Anne was allowed to return to England. Back at his ancestral home he planned additions and alterations to "pleasant Dilston Hall."

Very few of them were carried out, for the Jacobite Rising in 1715 ended all his hopes and plans. Escaping from Dilston by one of two underground passages that led from the castle to the banks of Devil's Water, he and his younger brother, Charles, joined the other Roman Catholic and Jacobite squires of Northumberland who had declared themselves for the Pretender. After an inglorious and ill-managed campaign, both were taken prisoner at Preston, Lancashire. Lord Derwentwater was attainted and condemned for high treason and beheaded. On the night before his execution there was a particularly brilliant display of Northern Lights over the Tyne valley. The country folk at Dilston took this as an omen and thereafter spoke of the Aurora Borealis as "Lord Derwentwater's Lights."

Charles Radcliffe managed to escape from Newgate gaol when already under sentence of death by hanging, drawing and quartering, and lived abroad until 1754. On his way to Scotland to join the Young Pretender, he was captured at sea and sent to the Tower, whence in due course he trod the same path as his elder brother—to the block.

After James Lord Derwentwater's attainder and death all the Radcliffe estates were forfeited to the Crown. To this day the lands near Hexham and around Lake Derwentwater are vested in the Trustees of Greenwich Hospital.

In 1868 a lady of eccentric character, who claimed to be Lord Derwentwater's great-granddaughter and to own some of the family plate, jewellery and other Radcliffe relics, sought to establish her right to the ancestral properties by "squatting" in the ruins of Dilston Castle, her only shelter being an umbrella and a tarpaulin sheet. After she had been evicted from the ruins, because they were considered unsafe, she lived for a time on the roadside in a tent until she was again ejected by order of the Hexham magistrates.

The sight of Dilston Castle, once a stately mansion of mellow stone, now but an empty shell and reduced to a single wing (masses of stone were quarried away at various times and used for buildings in the vicinity, for example the Angel at Corbridge) cannot but evoke sad memories of the gentle, gallant Lord Derwentwater, who had no stomach for armed rebellion but felt compelled to join the "Fifteen" from sheer devotion to the Stuart king.

CRANSHAWS KIRK

By Rev. C. E. EDDY

The origins of the parish and kirk of Cranshaws are not known, but Roert de Strivelen, vicar at Cranshaws, swore fealty to Edward I at Berwick in 1296.

In the thirteenth century, David de Bernham set up many parishes and consecrated many parish churches. It is a fair assumption that Cranshaws was of that era.

John of Ellem was a defender in an action by Sir John Swinton of that Ilk relating to the erroneous delivery of writings in an inquest and brief in favour of Alexander, Duke of Albany, of a chapel upon the lands of Cranshaws. This was in 1476. About 1516, Catherine Lauder, wife of Sir John Swinton, in her will, of October, 1515, directed that her body was "to be buried before the altar of St. Ninian in the parish church of Cranshaws.

This may offer some indication that there was a cell or chapel of seventh century origin at Cranshaws. There were certainly Celtic missionaries in the area then, as is known from place names and the origins of other places of worship.

The ruins of an ancient church stand in the old graveyard at Cranshaws. It ceased to be used after 1739. The dimensions are small, and the walls are massively constructed of rubble and mortar. Overall, the building was twenty feet by twelve feet. About a hundred years ago, someone disinterred from before the east end of this church, human bones of great size and two swords of enormous size. The swords were removed to Longformacus Smiddy and were used by the smith in his work. What became of the bones is not recorded, but at the time, this find gave credence to the legend of the Twinlaw Cairns.

There is at Cranshaws Peel, to the west, a stone which purports to mark the burial place of the Swintons of that Ilk.

If this is fact, then there must have been another place of worship, equally as ancient as the parish church. The most interesting story of the old parish church is the legend concerning James VI. It is said that the king, while on a visit to Yester, rode to Cranshaws. Robert Swinton, laird of the barony of Cranshaws, had presented his younger brother to the living. This young minister, did not offer the customary prayer for the king. James was annoyed and, to remind the minister in all time coming, of his duty, had the Royal Arms placed opposite the pulpit.

The manse was beside the church and the site is still clearly visible. In 1711, a new manse was built about a mile east and the glebe lands were also re-allocated. For nearly forty years, the minister and laird were in difficulties over this transfer and also the non-payment of tiends. In 1738, the laird swore a most binding oath before the Sheriff and Presbytery.

This Oath and Bond of Fidelity, brought to an end a long and stormy episode which had included the minister and laird being cried at the mercat cross in Edinburgh.

A new parish church was built south of the manse in 1739. It was a plain rectangular building of poor construction and was constantly in need of repair. The minister wrote in 1832, "that the stables of many gentlemen were in better repair than Cranshaws Kirk." This state of affairs was remedied in 1898 when Andrew Smith, Esq., of Cranshaws and Whitechester, undertook to re-build the church. Mr. Smith employed George Fortune, Duns, an architect with most up-to-date ideas, to design and supervise the new building. The old walls and foundations were utilised and adapted to the new construction. Red freestone was used for windows and doors, but the corbelling and ridging were of cast aggregate faced with cement. An early experiment in pre-cast work. Mr. Fortune also pioneered the use of flat roofs. These were never wholly satisfactory, not through faulty design, but because of lack of knowledge in the new techniques and materials. The vestry roof is probably the last flat roof extant of Mr. Fortune's design.

The exterior of the church is of pleasing colour, being built of whinstone and pointed to reveal the stone. The motif is Byzantine and the windows and door shapes in red sandstone, conform to the convention of that style, and are set off admirably by the grey-blue of the whinstone. On the skew putts are heraldic devices from the achievements of the families which have had connections with the barony of Cranshaws. These include the Matriculated arms of Andrew Smith. At the south-west corner, there is a four-sided sundial, two sides of which are mutilated. It bears the legend: "Mr. J. C. 1731 labuntur . . ." Mr. Campbell was minister, 1706-1759.

A series of masks carved in freestone decorate the exterior (east) of the apse. These are grotesque, humorous and fanciful. Highly decorative crosses are placed on both east and west ends of the roof. An unusual door on the north wall gives entry to the "lairds loft." This door is half round and built in oak. The furnishings on this, as on the vestry and west doors are handwrought iron.

Inside the church, the dominant colours are black for wood and white for plastered walls. The roof is barrel-shaped and made of Siberian deal stained black. Oak is used for the trusses and the bosses are gilt. There are three medallions in the roof in heraldic colours—the dove, St. Andrew, the Paschal lamb. Carved heads ornament the supports of the trusses. These are set in opposite pairs and represent types of people, cf., A lord and his lady, etc. Over the vestry door are the Royal Arms. These were restored and tinctured by the craftsmen from the Ancient Monuments Division of the Ministry of Works. The interesting feature of this restoration is that the date of the Royal Arms is independently set by the Lord Lyon and the Ministry of Works as prior to 1473, whereas the date for their original placing at Cranshaws is 1694-5.

Oak is used for the pulpit, Communion table and chairs. All are stained black. This is not bog oak, as is often assumed. Bog oak is seldom found in sufficient quantity to make complete sets of furnishings. Attached to the pulpit is an ancient iron bracket which formerly held the baptismal bowl. All the light fittings are of modern work in Duns, by the blacksmith.

The design incorporates traditional crook shapes appropriate to pastoral work.

Silver plates on the pews mark that the fittings were given by families which have a connection with the parish and church.

Outside the church are gates of modern hand-wrought iron also showing crooks and commemorating the Darlings of Priestlaw.

Communion Plate consists of pewter cups and patens of eighteenth century date. Handsome silver hand hammered Chalices are now in use since 1858. The patens were a gift to the church marking the long association of the Caverhills, tenants at Crichness, 1803-1932, with the church.

Mr. Campbell, is said to have given succour to Jacobites in the manse during the risings 1715-1745.

Dr. Webster's Widow's Pension Fund, 1765. The living at Cranshaws was £50. The widow's pension was £40. The minister proposed to a farmer's daughter and when she consulted her father, his advice was "tak him Jenny. He's as near good deid as living."

"This is like Cranshaws Kirk. There's as many dogs as folk." It is within living memory when the herds came to church accompanied with their dogs. "It's a rough road to Cranshaws." This saying came into use during the hard winter of January-March, 1838.

Gravestone in old churchyard: The oldest legible is of date 1665 and is possibly of the minister's son or father. A large stone records the lives of the Bertrams from the early 18th century to 1943.

An interesting stone in the present churchyard records the fact that Jean Punton was shepherdess at Priestlaw for 25 years.

Six people in the parish were named in the Porteous Roll in the 17th century for Covenanting sympathies.

Robert Douglas, Gavinton, Duns, was the joiner responsible for the woodwork in the re-construction of Cranshaws Kirk, 1898-1903. It is said that he was sadly out in his estimate,

and judging by the quality of the work this may well be true. Douglas was noteworthy for telling tall tales. The most amusing concerns a large beech tree which overhung some chimneys at Langton House. This tree was the favourite roost of crows. All efforts to dislodge failed. The Marchioness (of Breadalbane) sent for Douglas. His solution was to coat all the branches with bird lime. In the morning, Douglas fired both barrels of his gun under the tree, the crows took off taking the tree with them. Unfortunately, the tree roots caught one chimney pot and broke it. "And d'ye ken," said Douglas, "she took me to the Court of Session for damages."

The mason who carved the masks on the east wall was said to be so often drunk that he often had to pawn his tools. Tradition has it that the Grotesque masks were the result of his potations and that he cut the stone with a sharpened nail and a piece of whinstone, instead of the conventional tools. All the workmen had a six day week of twelve hours each day, beginning on the site. The masons walked from Chirnside and the joiners from Gavinton. This would mean that they would leave home at about 3.30 a.m., and not return until 8.30 p.m.

CRANSHAWS CASTLE

By S. E. A. LANDALE, O.B.E., Ph.D., M.I.E.E.

My knowledge of the history of Cranshaws Castle is derived almost entirely from George Swinton's book "The Swintons Of That Ilk," which was published in 1883, and from subsequent letters written to my Great-Aunt and to myself: the last of which he wrote shortly before his death. The name Cranshaws is derived from Crane-Woods and herons still nest in the vicinity.

The first we know of Cranshaws is that it was in the possession of the Earls of March in 1350 and was then a fortified place. It passed to the Swinton Family in 1401. I believe they lost possession of it for a few years, but it was restored to them in 1412 and remained in their hands until 1702. The Sir John Swinton of that period, with the consent of his wife, sold the lands and barony of Cranshaws, with the patronage and teinds of the Parish, to David Denham, Writer of Edinburgh, James Denham, his son, sold the property to James Watson of Saughton in 1739 from whom it descended, through his mother, to Lord Aberdour, eldest son of the Earl of Morton. It was purchased in 1895 by Andrew Smith of Whitcheater and became the property of the present Proprietor, his grand-nephew, in 1931.

MacGibbon and Ross place Cranshaws in what they call the 4th Period. George Swinton was very disgusted about this and complained that MacGibbon and Ross wrote up Cranshaws Castle in their "Castellated and Domestic Architecture of Scotland" without consulting the Swinton family or visiting the place. However, it is clear from George Swinton's notes that the Castle was built by the Swintons in the 15th century and was completed before the end of that century. The Swintons owned the Castle for the whole of its fighting life, and after they departed the building fell gradually into decay, but was always habitable, and, as you will have seen on your visit, was restored to good order by my uncle about 1896-7. It has recently been completely externally restored and should last without further expense for another 60 years.

Cranshaws Castle was used as a Retreat in times of stress for the Swintons, who were, even then, an ancient and distinguished Family of the Merse. There is record in the Hamilton papers of a raid on Cranshaws when the raiders succeeded in getting away with 400 head of cattle, 2,400 sheep, 25 horses, took 20 prisoners, and slew 5 Scots. This raid took place in 1544.

One of the points about Cranshaws that interested George Swinton most was the connection of Cranshaws with the story of "The Bride of Lammermoor." His arguments are expressed frequently in his book, in letters to *The Scotsman* and to *The Times* over the last fifty years. Probably the most reasoned argument appeared in a letter to *The Scotsman*, signed with the pseudonym "An Antiquary" on the 23rd June, 1927, and I append a copy of this letter for you to see.

A further point in the history of Cranshaws, which must have been referred to by the Minister when you visited the Church, relates to the visit of James VI of Scotland to Cranshaws Kirk, that is the Old Kirk below the Castle, in 1598. The story is that he rode over from Yester House and attended the service at Cranshaws. The Minister was much put about by the presence of Royalty in his little Church and forgot to pray for the King. The King was cross and said so, and sent a Coat of Arms to be mounted in the wall opposite the pulpit, so that the Minister would not forget in future. This Coat of Arms you will have observed in the new Church where I recently had it restored to its original heraldic colouring. I have never regarded James VI as one of the finest characters in Scottish history, and he was certainly very mean because the Coat of Arms which he sent was, in fact, his grandfather's, which he must have found in some hole or corner in Falkland Palace or Holyrood.

George Swinton, to whom I have repeatedly referred, was George Campbell Swinton, father of the Brigadier who presently lives at Kimmerghame. He was a man of great literary and antiquarian distinction, Lord Lyon King of Arms, and even at one time Chairman of London County Council.

Mr. Andrew Smith's wife, Ida Florence Landale, laid out the very attractive garden and policies in 1900-1905. She owned

the whole property in her own right from his death, in 1914, till December, 1931, when she made it over to me.

THE BRIDE OF LAMMERMOOR

June 23rd, 1927.

Sir,—To create mystery was as the breath of the life to Sir Walter Scott, and in his whimsical way he wove history into romance. In "The Bride of Lammermoor" he brought a true tale of the West across Scotland, and set it down in the country he knew so well, wrapping it up in new names because its drama was so tragic. And thus perhaps it should have been left.

But mystery will only stimulate inquiry. Some weeks ago Colonel Wingate Gray, speaking to the East Lothian Antiquarian Society, told them that Nunraw was Ravenswood, quoting as his authority Mr. A. G. Bradley's delightful wanderings round "The Gateway of Scotland." Alas! thus is history made. For why should we adopt the guesses of the writers of to-day in preference to what was said, without contradiction, 60 years ago, when many who had known Scott well were still living? In the *National Gazetteer* of 1868 we read that Cranshaws was Ravenswood. And consider these facts and these probabilities.

In the novel we read of Wolf's Craig and Ravenswood, and, in chapter 23, between them, five miles from each—Scottish miles remember—of the public-house at Tod's-hole.

Then look at the map, and we see Fast Castle—and no one will deny that this is Wolf's Craig—and five miles to its south-west, and not in the least on the road to the more distant Nunraw, the old public-house to which a Grant gave his name at Brock-holes, and again, five miles further on, the Castle of Cranshaws—i.e., Crane or Heron Woods—with Ravens Craig marked on the map within a mile of it. Then the Castle of Ravenswood, Scott tells us, occupies and in some measure commands a pass through the Lammermoors. Yes, here it stands still, on the shortest road from Berwick to Edinburgh, a good peel-tower, untouched outwardly since the

Swintons built it in the 15th century. In the days of "the Bride" most Scottish castles were very small.

Remember that Scott himself tells us that the story was told him as a family story—there was the Rutherford connection—by his grandmother's sister, Margaret Swinton ; that this lady spent her earliest days at Cranshaws before broken fortunes caused her father to sell that property, just as the time that Scott makes Allan, Lord Ravenswood, sell Ravenswood ; that Edgar was a Wedderlie name and Allan a Swinton name ; that, for four generations before his Aunt Margaret, the Swintons, though they lived also in the Merse, had married in the Lammermoors, in turn a Sinclair of Longformacus, a Stewart of Blantyre and Wedderlie, a Home of St. Bathans, a Hepburn of Whitecastle, a Hay of Yester—all within a short ride—and that Scott was descended from all these marriages. Surely, when we ask ourselves what place Scott had in his mind when he wrote, the answer must be Cranshaws.

One point has puzzled many. Why did he choose the name of Ashton ? It was an English and not a Scottish name ; indeed, among some 25,000 names in the index to the Scots Peerage, it only occurs once, and then is of an Englishman.

May I suggest that he chose it for that very reason ? In Sir William Ashton he was going to depict a man whom he himself calls "tricky and mean-spirited." Many would have dubbed him worse. It would have been an offence to take the name of any Scottish family ; so he chose a name which never appeared in Scotland. For he had cause to know this. One of his ancestors was the Swinton who fell at Homildon, and round whose death he himself had written "Halidon Hill." Scott knew his life-story, and that he was the Scottish knight chronicled by Froissart as "a Sueton"—"a" was commonly used for "de"—which English copyists had misinterpreted as Ashton. In his "Minstrelsy of the Border" Scott corrected his mistake. Here, then, he realised was a patronymic which would offend no Scottish family, and so Lucy Ashton became a name in tragic literature for all time.

I am, etc.,

An Antiquary.

ARMORIALS AT FERNIEHIRST

By Major C. J. DIXON-JOHNSON, T.D., F.S.A.Scot.

There are six armorials on the walls at Ferniehirst—five on the castle and one over the chapel door. They are all said by the Commission on Ancient Monuments to be replicas of the originals which they say are kept within for safety.

Walter Laidlaw, writing in 1885, says that the armorials at Ferniehirst were covered with ivy until a recent severe frost uncovered the two over the main door and the one over the arch to the right of the tower. He described them as they are today. Those over the main door are the arms of Sir Andrew Kerr of Ferniehirst and his wife Dame Anne Stewart, and are dated 1598.

Sir Andrew Kerr was Provost of Jedburgh in 1601, was created Lord Jedburgh in 1621, and married Anne, daughter of Andrew Stewart, Master of Ochiltree in 1584.

Sir Andrew's arms are on the left of the window over the main door . . . a chevron charged with three mullets, crest a buck's head, supporters two savages (male and female), motto above the crest, "Forward in ye name of God," below the arms, "Soli Deo." Beneath the dexter supporter are the initials S.A.K. for Sir Andrew Kerr.

Andrew Stewart, Master of Ochiltree was the son of Andrew Stewart, 2nd Lord Stewart of Ochiltree, and his arms are on the right of the window . . . quarterly, 1st a lion rampant within a double tressure flory counter flory for Scotland, 2nd a fess chequy and in chief a label of 3 points for Stewart, 3rd, a saltire between 4 roses for Lennox, 4th a lion rampant for McDuff, the whole within a bordure company, crest a unicorn's head, supporters two dragons with tails nowed, motto . . . above the crest "Forward" and below the arms with the initials D.A.S. doe Dame Anne Stewart "Soli Deo." The Coat of Arms over the arch beside the old tower is that of Sir Andrew after he was made Lord Jedburgh, *i.e.*, Kerr of Ferniehirst

surmounted by a coronet. The initials A.L.J. stand for Andrew Lord Jedburgh.

Mr. Laidlaw says that he was shown in a vault at Ferniehirst a stone bearing the arms of Kerr of Ferniehirst, surmounted by a coronet and having the initials R.L.J. on it, which he says are those of Robert, 3rd Lord of Jedburgh, nephew of the 1st Lord. Robert Kerr was, in fact, 4th Lord Jedburgh, but the arms we see on the east side of the castle are probably those seen by Mr. Laidlaw. One of the bells at Jedburgh has upon it the same arms, coronet and initials, with the addition of two unicorns as supporters and the date 1692. Robert, 4th Lord Jedburgh, died without issue in 1692, when the title went by special remainder to his cousin, William Kerr, Master of Newbottle, who, on the death of his father, became 2nd Marquise of Lothian.

The shield over the window, above the main door, bears the arms of Kerr surmounted by a Marquise's Coronet, with, on the left, the initials S.H. in a monogram for Schomber Henry (9th Marquise of Lothian), and on the right the initial L. beneath is the date 1898.

The panel over the chapel door is also mentioned in 1885. This panel is today in two parts, the lower of which bears a shield charged with the Kerr arms, and the upper part has the initials S.A.K. and D.A.S. as before. Beneath the chevron are said to be the initials A.K., of which no mention was made by Mr. Laidlaw, who has also omitted to say whether in 1885 the panel was in two parts.

Dame Anne Stewart was descended from Robert Stewart, 3rd son of King Robert 2nd, who became in right of his wife Earl of Mentieth, and was one of the first Scottish Dukes, being made Duke of Albany in 1398. His son, Murdoch, 2nd Duke of Albany, married Isabel, eldest daughter and co-heiress of Duncan, Earl of Lennox, but was executed with his father-in-law and his two elder sons, his grandson Andrew Stewart, was, however, created Lord Avondale in 1489 by King James II, and dying without issue was succeeded by his nephew as 2nd Lord Avondale, whose son Andrew, 3rd Lord Avondale, exchanged that Barony with Sir James Hamilton

for that of Ochiltree which exchange was confirmed by Parliament in 1542, when it was laid down that he was to be known in future as Lord Stewart of Ochiltree.

Lord Stewart of Ochiltree's grandson, another Andrew, was father, with other children, of Anne, who married Sir Andrew Kerr of Ferniehirst, afterwards Lord Jedburgh.

Anne Stewart's brother sold the barony of Ochiltree in 1615 to his cousin, Sir James Stewart of Killieth, and was in 1619 created Lord Stuart, Baron of Castle Stuart, Co. Tyrone, in the peerage of Ireland, and his descendant is the present Earl Castle Stewart, whose arms are . . . Quarterly 1st or a lion rampant gules armed and langued or within a double tressure flory counter flory of the second for Scotland, 2nd or a fess chequy azure and argent in chief a label of three points gules for Stewart, 3rd argent a saltire between four roses gules barbed and seeded proper for Lennox, 4th or a lion rampant gules for McDuff, the whole within a bordure company argent and azure, in the dexter chief a canton of Nova Scotia (for his baronetcy). Crest a unicorn's head argent armed and manes or. Supporters two wyverns or their tails nowed, armed proper and langued gules. Motto: "Forward." These are the same arms as are to be seen at Fernieherst, dated 1598.

TREES AT FERNIEHIRST

During the visit of the Club to Ferniehirst an opportunity was taken to measure the lime trees to the south of the castle and also the Yew Tree.

The largest of the lime trees, in 1888, had a girth of 18 feet 3 inches and a span of branches of 80 feet, in 1924 the measurements were 20 feet 7 inches and 98 feet, and on this occasion 23 feet 1 inch and 107 feet.

The yew tree, in 1888, had a girth of 10 feet 7 inches, and in 1924 a girth of 11 feet 2½ inches. On this occasion the girth was found to be 12 feet 4 inches and the span 53 feet 6 inches.

All 1964 girth measurements were taken at 5 feet high.

CAPPUCK FORT

By Miss WINIFRED SIMPSON

The Roman fort of Cappuck is situated where Dere Street crosses the Oxnam Water, eleven miles south-east of Newstead. Nothing now remains visible on the ground, but the fort more or less occupied the ground of the field bounded by the modern road on one side, by Dere Street on another, and by the Oxnam Water on a third. It was only a small fort (the Ordnance maps mark it as a "Fortlet") 260 feet by 240 feet, not big enough to hold a cohort. Its purpose was probably to guard the river crossing and to provide exits on the road. It was surrounded by ramparts about 24 feet wide and outside them a ditch 16 feet wide and 6 feet deep. But in the course of its history, from 80 A.D. to about 196 A.D., it was altered four times, new ditches dug and stronger ramparts thrown up. In the latest period there were two ditches on the other side of the modern road and the fort must have resembled that at Ardoch. The ramparts were laid on a foundation of cobbles similar to those under the Antonine Wall.

Like Newstead, the fort had four phases of occupation :—

(1) By Agricola, who built it during his great advance of 80 A.D., which ended in the utter defeat of the Caledonian tribes at Mons Graupius.

(2) Some years later, during the reign of Domitian. (Tacitus makes bitter remarks in his 'History' about Agricola conquering Britain and then his conquests being thrown away by the blunders of Domitian).

(3) By Antonine about 149 A.D.

(4) By Antonine about 160 A.D. There is no evidence that Cappuck was re-occupied after the revolt of the Northern tribes in 196 A.D.

The Roman name of the place is thought to have been

Eburocaslum. The Ravenna Cosmography gives this name immediately following Trimontium (Newstead).

The site has been excavated three times :—

(1) In 1886 by Mr. W. Laidlaw, custodian at Jedburgh Abbey, at the instigation of the Marquis of Lothian. He revealed a stone built granary, and the most important item connected with Cappuck, namely, the portion of inscribed stone now in the National Museum of Antiquities, depicting a boar and part of the letter X. This must have been a building inscription put up by the Twentieth Legion. The style of the stone quite certainly connects it with the first Antonine fortlet.

(2) In 1911 by Messrs. Miller and Stevenson who defined the defences and made a much more scientific excavation.

(3) In 1949 by Sir Ian Richmond after air photos by J. K. St. Joseph had revealed the ditches over the road.

The stone buildings inside the fort are all thought to date from the Antonine period. They include the commandant's house and a small bath house as well as a granary. There were also barracks which may have been timber built. Various scraps of Samian ware mostly come from the Antonine period.

The section of Dere Street, which passes the fort, is all double fenced. It is like this from Shorthead to Jedfoot, and we owe it to the 18th century drovers who used the old track to drive their beasts to the English market. They allowed the animals to stray into the crops, and the landlords being unable to prevent their use of the route, fenced the road. After Jedfoot the road becomes invisible for a while, but it can be picked up again in the Lammermuirs from Channelkirk to Soutra Aisle. Here it is not fenced and is difficult to follow, but quarry pits may be seen in places.

RUTHWELL CROSS

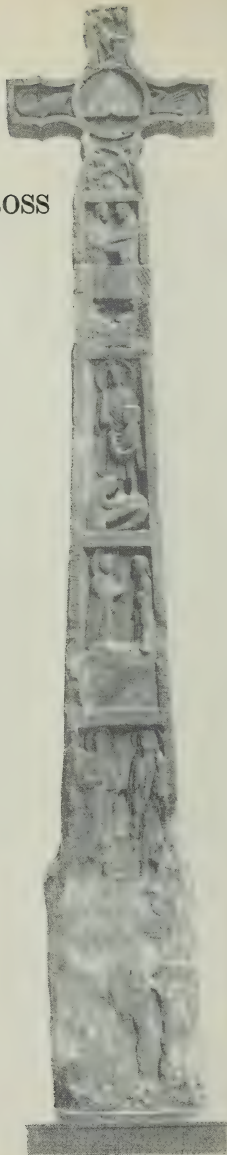


Side Views.

With acknowledgement to the Victoria and Albert Museum—Cr. Copyright.



RUTHWELL CROSS



Front.

Back.

With acknowledgement to the Victoria and Albert Museum—Cr. Copyright.

EXTRA MEETING AT BERWICK

A Meeting was held on 3rd December, 1964, within the King's Arms Hotel, Berwick, to see ciné and slides taken by members at Meetings during the past season. Dr. J. M. Carrick showed ciné and Major Dixon-Johnson showed 90 slides taken by members to about 80 members.

Slides were lent by Capt. Walton, Mr. George Bell, Mrs. Bruce, Miss Dickson, Miss Lumley, Miss Brigham and Major Dixon-Johnson.

C. J. D.-J.

CHESTER CRANE CAMP

The above camp, which has recently been scheduled by The Ministry of Works, is situated on the south bank of the Tweed, some $2\frac{1}{2}$ miles above Tweedmouth, and forms part of the Middle Ord Estate.

The area covered is now just under 3 acres and is roughly triangular in shape though the river, which forms the 227 yards northern boundry and runs rapidly along at the bottom of a 100 foot cliff, may, in the course of years, have altered the shape and reduced the area. The west boundary of some 140 yards is formed by a deep ravine through which runs the Canny Burn. The south side of the triangle, measuring 220 yards, is composed of a ridge of earth 5 feet high, and a deep ditch 21 yards wide, on the outside from which it would seem soil has been removed to help form the ridge. At either end of the south side there are entrances protected on both sides by mounds thrown up in the middle of the ditch.

Raine in his 'North Durham' attributes this fortification to the Romans in connection with the Devil's Causeway which crossed the Tweed nearby.

The site is crossed from west to east along the top of the cliff by The Pilgrim's Way.

C. J. D.-J.

THE CROSSES OF RUTHWELL AND BEWCASTLE

CECIL L. CURLE, F.S.A., F.S.A. (Scot.)

The tall, sculptured crosses at Ruthwell in Dumfriesshire and at Bewcastle in Cumberland, although broken and defaced ; are amongst the most interesting of all the Anglo Saxon monuments, not only in the Borders, but in Britain. Carved with scenes from the New Testament and with panels of purely ornamental design, they belong to the period, over a thousand years ago, when Northumbria was an independent kingdom, extending in the East from the Humber to the Forth and in the West to Galloway.

The most northerly of the Anglo-Saxon¹ kingdoms, Northumbria was consequently the only one in contact with the Celtic peoples north of the Forth and Clyde—the Picts on the East ; the Scots on the West. The Picts were an indigenous people, but little is known of their early history as they left no written records. The Scots² were invaders from Ireland and their kingdom of Dalriada, roughly modern Argyllshire, was politically linked with that country. Although they were often at war, there were long periods of peace and the Northumbrian royal families intermarried with both the Scots and the Picts, and also with their neighbours to the West, the Britons of Strathclyde. Strathclyde remained an independent kingdom after it was cut off from Wales when the Northumbrians pushed as far west as the Solway. While Northumbria was still pagan these three Celtic kingdoms were already Christian—Strathclyde from the time of the Romans—St. Ninian, who remains a shadowy figure, is said to have built his stone church of Candida Casa at Whithorn. It is possible

¹ There were Jutes in Kent, Saxons in the South and Midlands, Angles in the North, but their civilization and culture is generally referred to as Anglo-Saxon.

² Until the 9th century the term Scot meant Irish. The inhabitants of both Ireland and Dalriada were referred to as Scots.

that there were Christians in Dalriada before St. Columba came to Iona from Ireland, and the Picts were Christianized in his lifetime. The fact that the first permanent mission to Northumbria was from Iona, when Bishop Aidan, at the request of King Oswald of Northumbria, established his mission at Lindisfarne, led to still closer links.

The Anglo-Saxon kingdoms to the South had on the other hand little contact with the Celtic world. They received their Christianity from Rome—St. Augustine of Canterbury came to Kent in the same year, 597, that St. Columba died in Iona. The British Church, crushed in the South and East of England survived in the West where there were important monasteries in close touch with Ireland. But when Augustine called the British Bishops to a meeting both the Anglo-Saxons and the British were surprised and horrified to find how strong were the differences between them. In a hundred and fifty years of isolation when the pagan Anglo-Saxons were surging into England and the barbarian tribes sweeping across Europe, the British and Irish churches had retained the old ways and developed their own customs, while different ones had arisen in Rome; the most obvious, and one about which both sides felt passionately, was a change in the date of Easter, for a new calculation had come into use in the Roman church. The British bishops absolutely refused to accept this and there were no further meetings. But Northumbria followed the Celtic way. The two bishops who followed Aidan at Lindisfarne were also Scots from Iona. Lindisfarne remained a Columban monastery, but as an Anglo-Saxon state Northumbria was of course in touch with the other Anglo-Saxon kingdoms to the south. The wife of King Oswald was a Christian princess from Kent, who, with her chaplain and followers, kept the new date of Easter. At the Synod of Whitby in 664 the Roman rule was accepted in Northumbria, but even though the Irish monks and a number of the Saxon monks left Lindisfarne for Iona, Irish influence remained strong.

From Bishop Aidan, and the Irish monks, the church in Northumbria had received an example of simplicity and unworldliness, with its ideal of the lonely life of the anchorite which had driven the restless Irish monks as far north as

Orkney, "seeking a desert in the trackless sea." St. Cuthbert, Bishop of Lindisfarne, thirty years after Aidan, ending his life as a hermit on Farne Island followed in the same tradition. This was the background in which Northumbrian art developed. It was roughly speaking made up of three elements: a combination of Germanic and Irish art, to which was added but not assimilated, the classical art of the Mediterranean. When the Anglian ancestors of the Northumbrians arrived in England they were already skilful workers in metal. Their taste was flamboyant, they loved gold and garnets, their brooches, belt buckles, sword pummels and harness mountings were decorated with patterns made up of writhing distorted animal forms with snakes and birds and dragon-like creatures. Irish art, brought to Lindisfarne by the monks from Iona, was also essentially decorative, but the Irish used purely abstract rather than animal forms. The spiral was the basis of many of their patterns, some of which were very similar to the late Iron Age work of the Britons at the time the Romans arrived in England. They also were skilful metalworkers using gold and silver, and enamel. Although the patterns were very different in England and Ireland their technique was similar. The decorative forms of the two peoples combined readily and other patterns were added, for example, interlacing, which was soon to be found on almost every Northumbrian or Irish, or for that matter, Pictish work of art. This was not in origin Irish and may have been introduced through manuscripts. It was in common use in the Mediterranean world, in Coptic Egypt, in Greece, in Italy, in fact almost everywhere, over a period of several centuries.

The same patterns were used on metalwork as on stone carving, on secular as well as on sacred works. In no country did a specifically Christian art develop immediately. Whatever form of art was in use in pagan times was merely adapted to a new purpose. In Rome, in the early Christian period, representations of Christ and of the Apostles are in the customary pose and costume of Roman senators; the figures of angels were copied from the Victories so common in Greek and Roman art. So it is not really surprising to find reliquaries and croziers, stone crosses as well as pages of manuscripts, covered with a strange mixture of abstract and animal

forms, with running scrolls made up of queer fantastic animals and birds, often with legs and tails and even snouts entwined to form an elaborate interlaced pattern.

In the early days after they had become Christians the Northumbrians had little direct contact with the Mediterranean world and no conception of representational art. Themes from Mediterranean sources, which no doubt came to them through small portable objects in bronze and ivory, as well as manuscripts, underwent a transformation, so that even a crucifixion would be treated in a purely decorative way. But after the acceptance of the Roman computation of Easter, contact with Canterbury, and through Canterbury not only with Rome, but with the whole Christian world, was established. For example, Theodore, the first of the Archbishops of Canterbury to be obeyed by all the English church, was a Greek from Tarsus, and he was accompanied by the Abbot Hadrian, an African. The road to Rome was open again for the first time since the 5th century. But the Europe it led through was very different from the time when St. Ninian was, according to Bede, "regularly instructed at Rome," and bishops from the church in Britain attended Councils in Gaul. All western Europe was now ruled by Germanic peoples; Lombards and Ostrogoths in Italy, Franks in Gaul, Visi-Goths in Spain.

England was now part of Europe, no longer a remote outpost as in Roman times. The thoughts of all English Christians were now on Rome, the Holy City, where were buried the Holy Apostles, Peter and Paul, in whose name numerous churches now being built all over England, were dedicated. Young and old, laity and clergy, men and women, made the difficult and sometimes dangerous journey through Merovingian Gaul. Two Saxon kings abdicated in order to spend their last years as monks at the church of St. Peter in Rome. It is fascinating to imagine the journey of these pilgrims. Their usual route seems to have been through Tours, where they would stay at the monastery nearby founded by St. Martin, traditionally a friend of St. Ninian, then they would go down the Rhone by Lyons and Arles, sometimes staying through a hard winter with an abbot or a bishop, and finally by sea from Marseilles. In Rome there is much that

they saw that we can see to-day. Ostia Antiqua, the port of Rome, has fairly recently been excavated and two storey brick buildings still stand. In the city the classical buildings were already falling into ruin, the marble facings having been torn off the walls of the great palaces when Rome was sacked by the Goths and Vandals. They would visit the Catacombs, then as now one of the great places of pilgrimage. The old basilica of St. Peter's no longer exists, but other great basilicas remain. Santa Sabina is almost unchanged, with its splendid cedar wood doors, dating from the fifth century, carved with scenes from the Old and New Testaments. Santa Maria Maggiore is little changed, and there were many others, all glowing with mosaics, and golden lamps and embroidered hangings. The Pantheon, built by the Romans as a temple to all the Gods had recently been consecrated as a Christian church. To the Anglo-Saxons, who built only in wood, and who, when they first came to England and saw the ruins of the stone built houses and walls and bridges of the Romans, thought that those must be "the cunning work of giants," a whole new world was opened.

Amongst the most frequent and best known of these visitors to Rome was Benedict Biscop, who as a young nobleman had left the court of Northumbria to go to Rome "to worship in the body the resting places of the Holy Apostles" and had spent two years as a monk at the island monastery of Lerins, off the coast of Marseilles. He returned to England and was for a time abbot of St Peter's at Canterbury and finally, back in Northumbria, abbot of the twin monasteries of Monkwearmouth and Jarrow. Churches in Northumbria had been built in wood until then, but he sent to Gaul for masons to build his churches "in the Roman manner" and for workers in glass to make windows. He made many journeys himself, bringing back books and relics, vestments and embroideries, gold and silver altar vessels and pictures painted on wood to adorn his church of St. Peter's at Jarrow. All these details we read about in "The Ecclesiastical History of the English Nation," completed in about the year 731 by the Venerable Bede, only forty years after the death of Benedict Biscop. It was an eye witness account, for Bede had entered the monastery when

he was seven years old and had been educated by Benedict Biscop and passed all his life there.

Carving in stone, as well as building in stone, was a new skill acquired by the Northumbrians, and new too was the conception of representational art, which they added to, without discarding, their old purely ornamental style. On no other monuments is it shown as clearly as on these crosses of Ruthwell and Bewcastle, where, perhaps for the first time, figure scenes were no longer reduced to mere two-dimensional patterns.

It is a surprising fact that carved, tall stone crosses were erected no-where else in western Europe, between the 8th and the 12th centuries, but in Ireland and Great Britain. Ireland, Cornwall, Wales, Northumbria, each had its distinctive type. In Pictish Scotland the tall cross-slab was the equivalent. Ireland has the largest number of crosses and in that country they may have developed from the stone pillar inscribed with a cross. Tall stone crosses did, however, exist in the eastern Mediterranean and as there seems always to have been some communication between Ireland and Christian communities in the East, probably by sea through the Straits of Gibraltar, it is possible that they may have been introduced by that means. In Ireland they are usually associated with monasteries. In Northumbria it is probable that they were "preaching crosses." Bede never mentions them, although he does describe the raising of a wooden cross. As far as I know the only contemporary reference to them is in the life of an Anglo-Saxon saint called Willibald, written in the middle of the 8th century, where it says that "it is the custom of the Saxon race that on many of the estates of nobles and good men they are wont to have, not a church but the standard of the Holy Cross, lifted up on high, dedicated to Our Lord, and revered with great honour, so as to be convenient for the frequency of daily prayer."

The cross at Ruthwell is the more important and probably the earlier of the two. When complete it was 17 feet high, which is unusually tall. An early 17th century account describes it as standing "as high as the church." It does not appear massive, for the shaft is slender and tapered, and the head, which has been re-constructed, is small, with the grace-

fully curved arms which are typical of the Northumbrian crosses. It used to stand in the churchyard of the small parish church of Ruthwell in Dumfriesshire, about 6 miles west of Annan. In the 17th century when the General Assembly ordered the destruction of all free-standing crosses as monuments of idolatry the minister of that time buried it beneath the floor of the church rather than destroy it. Two hundred years later it was dug up and re-erected in the churchyard, and later, as it was getting badly weathered, it was restored and placed in a specially constructed addition to the church.

All four sides of the cross are carved, both the front and the back with figure scenes. These are set in recessed panels, each outlined by a rather wide plane border on which are inscriptions in Latin, for the most part quotations from the New Testament, explaining the scenes which they surround. Most of the head of the cross is a modern reconstruction, but two of the original carvings remain on each side.

Taking what I am referring to as the front of the cross first. In the topmost panel is the carving of a bird, possibly an eagle, perched on a branch, with around it an inscription in Anglo-Saxon runes—runes were the alphabet of the Anglo-Saxon and Germanic peoples, the Latin alphabet came with Christianity—thought to read “Cadnum me made,” but the interpretation is doubtful. In the lower panel of the head are two little figures which have never been identified. The panel at the top of the shaft contains the figure of John the Baptist, holding on his left arm the Agnus Dei, and standing on two globes. What remains of the inscription reads, “We adore.” Next comes the largest and most important panel, containing the figure of Christ. He has a halo with a cross and is wearing a draped robe. His right hand is raised in blessing and his left hand holds a scroll. This is the conventional attitude and dress familiar in early manuscripts and in frescoes which can be seen at Ravenna and in the 5th century church of S.S. Cosma e Damiano in Rome. What is surprising and unusual is that Christ is standing on the heads of two great beasts. The inscription, from an apocryphal Gospel of the Nativity, reads, “Jesus Christ the judge of righteousness,

beasts and dragons knew the Saviour of the World in the Desert." In the next panel is a scene which would have been recognizable at the time even without the inscription, "St. Paul and St. Anthony broke bread in the Desert," for it was one of the most popular themes in the limited iconography of the early Irish crosses and the Pictish cross-slabs. It illustrates a charming story told in St. Jerome's lives of the Desert Fathers. It tells how a raven brought half a loaf of bread daily to St. Anthony in the desert, and how, when St. Paul visited him (not of course St. Paul the Apostle, but St. Paul of Egypt), a whole loaf was brought and St. Anthony exclaims, "These sixty years I have received half a loaf, but at your coming Christ has doubled His soldier's ration." As neither of the two Holy men were willing to be the first to take the bread, the difficulty was solved by each taking hold of the end of the loaf and breaking it in two. Below this is the Flight into Egypt. The scene overlaps the panel and there is no St. Joseph shown, although all that remains of the badly weathered inscription reads, "Mary and Jo" The carving on the massive base of the cross is completely worn away.

Now turning to the back of the cross. Of the two original carvings on the head, one shows the seated figure of a man with a book on his knee. A large bird at his side holds onto a branch with one claw, while the other claw stretches out to the book. The inscription is taken from the first words of St. John's Gospel, "In the beginning was the word." That the figure represented St. John the Evangelist would have been clear to anyone at that time and also that the bird was an eagle, as the symbols of the Evangelists, the Eagle, the Calf, the Lion and the man with a book, taken partly from the dream of Ezekiel, partly from the Revelation of St. John, appeared in almost every illuminated manuscript. The other carving shows an archer shooting into the air. This archer-figure is fairly common in Northumbrian art and also in Ireland and Scotland, but no-one has yet explained what it means and unfortunately here there is no inscription. The shaft is divided into four panels, as at the front. Beginning at the top the first panel contains two figures embracing one another, clearly the meeting of the Virgin Mary and Elizabeth, although

the inscription is illegible. In the second and largest panel, is the figure of Christ in a similar pose to the corresponding panel on the front, but with a book in his left hand instead of a scroll. At his feet is Mary Magdalene, wiping them with her hair. The inscription reads, "She took an alabaster box of ointment and standing behind him she began to wash his feet and to wipe them with the hairs of her head." The next panel shows two standing figures. One has a halo with a cross, showing that it is Christ, and is explained by the text, "and going forth he saw a man blind from birth and healed him from his infirmity." Next comes the Annunciation. The Angel, with a halo and long, sweeping wings, bends towards the Virgin Mary. "The Angel having entered" is all that remains of the inscription. On the base is a Crucifixion, badly weathered, of a type going back to the very early days of Christian art, with the sun and moon above the arms of the Cross, and St. John and the Virgin Mary standing on either side.

The arrangement of these scenes seems at first sight puzzling. As they are obviously not in chronological order, the link between each is not easy to determine. It appears though that the scenes on the back are complementary to those on the front and that they should be taken in pairs. One should start with the two largest and most important: on the front, Christ in judgement—this thought always in men's minds as the end of the world and the second coming of Christ was expected at any moment. On the back: Christ with Mary Magdalene, signifying forgiveness. The two illustrating Justice and Mercy. Above these two panels are two figurations announcing the mission of Christ: the Visitation on one side; on the other St. John the Baptist holding the Paschal Lamb. Below come the two hermits, their breaking of bread a well understood symbol of the Eucharist. The scene complementary to this one is the miracle of the blind man receiving his sight. The story is told in St. John's Gospel which gives the reply to Christ, "Lord, I believe." The scene in early Christian art was generally used as a symbol of baptism and salvation. This relation between Salvation, the Last Judgement and the Eucharist occurs in early hymns and missals. Next comes the Annunciation which must be the beginning of any series of

scenes of the life of Christ, and parallel on the other side in the Flight into Egypt. The part of the base where no carving remains held probably a Nativity, for on the other side is a Crucifixion. This would have shown the beginning and the end of Christ's incarnation. The scenes on the front have also a separate significance ; all have been shown in versions which emphasize the pre-occupation of the Celtic church with eremitical life : St. John the Baptist, the first hermit in the desert, Christ standing on two beasts is taken from an apocryphal gospel telling how Christ in the desert was adored by the Powers of Evil which have been forced to recognize Him as the Saviour of the World. The two Hermits of course represent the life of the anchorite.

Both sides of the cross are carved with what is known as the "Northumbrian Vine Scroll," set in a long recessed panel. Ornamental scrolls of vines, sometimes with birds pecking at the bunches of grapes is a common theme in late classical art and in the eastern Mediterranean. The Northumbrians adapted this pattern to suit themselves. Plant ornament was quite foreign to them and they stylised the leaves and grapes, forming the stem into wide loops in which climb birds and little furry animals with fishes tails. On the wide borders of these panels is a long inscription in runes. It starts at the top of one side and continues all round the panel and then right round the panel on the other side of the shaft. It consists of verses from the Anglo-Saxon poem, "The Dream of the Holy Rood." It tells the story of the Cross as though the Cross were speaking, remembering how, as a tree in the forest—to a people who had come from a country of forests, who built in wood, this idea would come easily—how it was cut down and fashioned into a cross. Most of the runes are still legible, the few which are not can be filled in from another version of the poem and are put in brackets :

Prepared himself then God Almighty,
 for he would on the gallows climb
 courageous before men
 Bend (I dared not)
 I bore a great king
 the Lord of Heaven ; bow I dared not.

Men reviled us both together. I was bedewed with blood,
drenched

Christ was on the Cross.

Nevertheless there came hastening from afar

Nobles to the solitary one. I beheld all that.

Sorely I was with sorrow troubled, bowed (I to allow
them to take down the body)

(I was) with arrows wounded.

They laid Him down the limb-weary one ; They stood (at)
His body's head

There they beheld (the Lord of Heaven).

This cross at Ruthwell is unique. In shape it is purely Northumbrian, but the scenes portrayed, the long inscription, the style of carving, are something new in northern art at that time. The identification of a scene by a text is found on no other monument. The native decorative art of the Northumbrians could give no Christian message, but here on one monument is a whole range of Christian teaching. That this teaching by pictures was used in churches is proved by the account given by Bede of the pictures brought from the continent by Benedict Biscop to adorn the walls of his church of St. Peter's at Jarrow, consisting of complementary scenes from the Old and the New Testaments, "so that everyone who entered the church, even if they could not read, wherever they turned their eyes, might have before them the aimiable countenance of Christ and His Saints, though it were but a picture, and with watchful eyes might revolve on the benefits of Our Lord's incarnation, and having before their eyes the perils of the Last Judgement, might examine their hearts the more strictly on that account." New, too, is the style of carving, deeply cut, almost sculpture in the round. Although there must have been very many Roman statues all around them, particularly in the region of the Wall they do not seem to have any influence on Northumbrian carving. In most of the carvings of the Ruthwell cross the influence of Mediterranean models is clear. The figures of Christ and of John the Baptist follow a long established convention. The Angel of the Annunciation resembles fairly closely an angel on a sarcophagus at Ravenna, and this same sarcophagus also shows

Christ over two beasts. The scenes have not been translated, as was always earlier the case in Northumbrian art, into the idiom of decorative design, turned from a living scene into a pattern. There is movement in the gestures and the swing of the draperies. Some of the figures are shown three-quarter face, not looking stiffly to the side or the front. Here is a new art with a new purpose.

The cross at Bewcastle is clearly related to the Ruthwell cross, but it shows less Mediterranean influence and is more in the stylised, decorative tradition. The head is missing and there is no carved base and only the tall, slender shaft, 14 feet 6 inches high, remains. It stands, dramatically, perhaps, on the very spot where it was first erected, in the lonely churchyard of a tiny hamlet on the Cumberland fells. Nearby are the remains of a Roman fort, and beside it are the ruins of a medieval castle.

The carving on all four sides of the shaft is still remarkably clear, only the runic inscriptions have weathered badly. There are figures only on the West face. At the top is John the Baptist with the Agnus Dei on his arm, closely resembling the same figure at Ruthwell but without the globes at his feet. Above are indecipherable runes. Next comes Christ in Judgement, again very close to Ruthwell and with the two beasts beneath his feet. The top of this panel is rounded. Above it are two lines of runes reading GESSUS KRISTTUS. Below this panel comes a long inscription in runes which were at one time thought to read, "This tall standard of Victory set up Hwaetred, Wothgar, Olwfwold after Alcfrith lately king and son of Oswy. Pray for his soul." The bottom panel again has a rounded top. The figure of a man in a draped cloak stands with a large bird on his wrist. It has been suggested that it represents a falconer, but it seems more likely that it is St. John the Evangelist with the Eagle. John the Baptist and St. John the Evangelist were often associated.

The East face consists of one long panel in which is carved an "inhabited vine scroll" almost identical with those on the sides of the Ruthwell cross. The sides of the shaft are, however, completely different from any of the carvings at Ruthwell. Each side is divided into panels of varying lengths. On the

south side the top, middle and bottom panel are filled with interlacing: fine thread-like lines which form an intricate pattern, each one different from the other. The second and fourth panels contain highly stylised vine scrolls. In the upper one is a single twisting vine. In a loop formed by the stem is a semi-circular sundial, the rays marking twelve divisions. Similar sundials are found on Anglo-Saxon churches. The vine scroll in the lower panel is a double one, two stems merge and cross to form a symmetrical pattern. This love of symmetry is a Northumbrian characteristic; on each side of a central vertical line the pattern is often exactly repeated, whereas in Irish and Pictish carvings, although there is a balance between the two sides, the pattern is nearly always asymmetrical. On the North face there are again panels of interlacing and vine scrolls, and also a long panel of chequer work, twenty-three rows of eight tiny squares, alternately raised and recessed. As the shaft is tapered the panel is consequently narrower at the top than the bottom and the squares become imperceptably larger. This is a pattern not often found in sculpture or manuscripts.

The date of these two great monuments is uncertain. Some scholars place them as early as 700, others between 750 and 850. If the reading of the names on the Bewcastle cross were correct, the mention of King Oswy would place it in the 7th century, but as early as 1914 doubts were expressed as to its accuracy. The latest study concludes that the runes had been so weathered and so much tampered with, both accidentally and on purpose, that no certain reading can be given, but that on linguistic grounds, a date between 750 and 850 seems probable. It was in 731 that Bede tells that a bishop had newly been appointed to Candida Casa (Whithorn) because of "the increased number of believers." One might expect Northumbrian monuments in Dumfriesshire from this time onwards. In 792 the beginning of the end of Northumbrian power came when Lindisfarne was sacked by the Danes and the strange odyssey began when a band of escaping monks carried with them the coffin of St. Cuthbert, in which, besides the body of their beloved saint, they had placed the bones of Bishop Aidan, the head of King Oswald and amongst

other treasures the Book of Lindisfarne. For eight years they wandered from place to place, including a stop for a time at the monastery of Old Melrose. Over a hundred years later the coffin finally came to rest at Durham. The Vikings from Norway, having occupied the Isle of Man, settled in Lancashire. The Danes, from raiding, turned to settlement, as had the Anglo-Saxons themselves only a few centuries earlier, and occupied York and the southern part of Northumbria. When the Picts and Scots united their power gradually increased as the power of Northumbria diminished. If it seems surprising that a date as late as 800 should be suggested for these monuments it must be remembered that many of the finest carved crosses in Ireland were erected when the Irish, too, were living in the shadow of Viking invasions, their monasteries were pillaged and destroyed as were Iona and Lindisfarne, and that Dublin itself was built by the pagan Norsemen.

It seems astonishing that in Northumbria so much should have been accomplished in so short a time. It was 635 when Bishop Aidan founded Lindisfarne, 685 when St. Cuthbert became its bishop, 674 when Benedict Biscop built the stone churches of Monkwearmouth and Jarrow, 735 when Bede died. In only a hundred years Northumbria had passed from paganism to a leading place in European culture. Bede was recognized as one of the finest scholars in Europe. His output was prodigious. The demand for his books, on theology, on the Books of the Bible, on chronology and science, on rhetoric and metrics, was so great that the scriptorium of his own monastery could not keep pace with it. They were copied all over England and in Gaul as well. In manuscript illumination the Book of Lindisfarne and other manuscripts of the Hiberno-Saxon school were the finest of the time. These crosses that I have described and tried to place in their background are not only beautiful in themselves, but are precious and moving relics of the Golden Age of Northumbria.

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A SEVENTEENTH CENTURY DESCRIPTION OF BERWICK ON TWEED

British Museum Manuscript Harley 7017 contains a short description of Berwick, written early in the reign of Charles I by a person unknown. Some brief extracts from it were printed in David Laing's edition of *The Poems of William Dunbar* . . . (vol. II (1834), pp. 381-3), as a commentary on the fifteenth century poem 'The Freiris of Berwick.' Robert Weddell of Berwick, who had brought the document to Laing's notice, also quoted a few lines from it in an article on the town which he contributed to *The Penny Cyclopaedia* . . . (vol. IV (1835), p. 325), and these lines, describing the Castle, have been copied by other writers. The complete text was printed in T. F. Bulmer's *History, Topography and Directory of Northumberland* . . . (1887, pp. 763-5), but the transcription contains many errors.

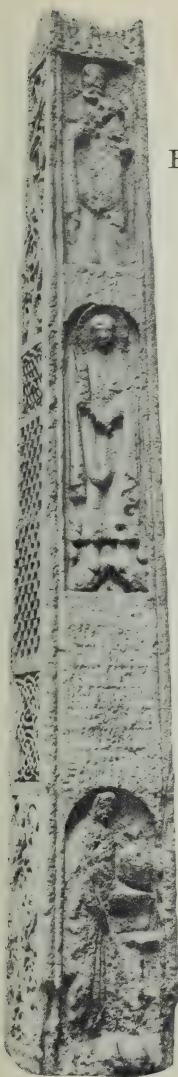
The document is printed here by permission of the Trustees of the British Museum. Abbreviations have been expanded and punctuation modernised. Two minor scribal errors have been emended: 'Paymaster' for 'Playmaster' in the second paragraph, and 'or quarrelsome' for 'of quarrelsome' in paragraph eight.

F. M. Cowe

A DISCRIPTION OF BERWICKE (B.M. MS. Harley 7017, ff. 167-168).

The utmost Towne of England seated between two mighty Kingdomes, shooting into the Sea with the which and the River Tweed it's almost incompassed. And whensoever any discord fell betwixt the two Nations of England & Scotland this Place was the first was to be taken care off, but since it was reduced under the Command of England by Edward the

BEWCASTLE CROSS



West Face.



South Face.

fourth, our Kings & Princesses did so strengthen it with Men, Munition, Bullwarks and strong Fortifications as they cutt of all hopes of wining it.

In this Towne were in times past kept & maintained neare One Thousand brave Soldiours, Horsemen, footmen & great Gunners, under the Command of Captains for foot, Constable(s) for horse & Quarter masters for great Gunners. There was a Lord Governor, a Treasurer, a Gentleman Porter, a Master of the Ordinance, a Chamberlane, a Marshall, a Muster Master, a Paymaster. Some of these were Comissioners with the Governer and knowne by their white staves. There was a Provast Marshall & two under Officers called Tipstaffes who were Goallours for Martiall Men offenders. There were alsoe certaine old Men named the foot Garrison who were allowed pay for picking the Walls and keeping them cleane.

This Towne was strengthened, environed & is incircuited with strong Walls and Flankers, each Rampier containing four or five great pieces of Ordinance. And every Flanker had two great ordinance opposite one to another for defence, which skowerd all Entrys. The Walls & Flankers were all trenched about with deep water ponds called Stankes. It hath five goodly Gates, a Watch Tower called the Bell Tower which gave warneing by towleing a Bell at the sight of any Shippes and did hang out a Flagg, giveng as many towles as there were Shippes, and such like if they espied any horsemen within our Bounders.

There was a skoot nightly of shott & Pikemen that lay without the Walls to give warneing if any enimie approachd by shooting of a smale piece. Then was there a Cannon called the Alarum Gun discharged within the Towne and the common Bell rung out, at which every Captain with his Company, which consisted some of 50, some of 100, repaired in Armes to their appointed places.

The Major with the Burgesses assembled together at the Towne Crosse with Halberts, Pattesons & Browme Bills.

But at the comeing of the Right Honorable Peregrine Barty Lord Willowby to be Governer, he ordained a strong watch nightly about the Walls, erecting Courts of Gaurds & Sentinell

houses, where nightly lay so many Corporalls with their full Squadrons in the Courts of Gaurds setting out Sentinells well weaponed, the whole Walls replennished with such a Watch as none might come or passe upon the Walls upon perill of their Lives, onely the Captain & his round consisting of Gentlemen & Officers with certaine Pentioners appointed for that service who had the watch word, which watch word was given by the Lord Governor to the Clerke of the watch and he gave it to the Captains & Corporalls. This Captain watched in the Statehouse standing in the midst of the Towne.

And the Captain began to walke the round & one with him to find whither the sentinells a waked or not, & so did the Gentlemen of the Statehouse walke their turnes about, couple after couple. If any watch man had beene found sleeping he was to hang over the Wall in a Baskett and there to stay certaine houres, with bread & Water for his food & a penknife to cut the rope after the time of his punishment was expired, and so he fell into a Stanke without dainger of Drowneing. And for such men as were litigious or quarrelsome in the night, they were adjudged to ride the great Cannon full Loaden whilest fire was given & she discharged.

This Towne hath severall secrett Vaults or passages to let men in & out at pleasure, besides the common Gates. It had two of the fairest wind Mills in great Britaine. It hath a commodious Key for Shipps, a faire & Stately Stone Bridge, built at the charge of the late famous, pious, prudent and for ever memorable Prince & Monarch James King of great Britaine, France & Ireland. This Bridge hath Fifteene Arches under which runneth the pleasant & profitable River Tweed, so plentifull of Salmon fish that it not onely furnisheth our owne Kingdome but also other Forreigne Countrys. It hath had a goodly Peere containing a bout 240 yards in lenght, but envious time the devourer of all things hath decayed it.

This Towne had a strong Castle scituate upon a high Rocke in manner circular, but the want of repaireing it, as also the delapidation of the Walls, cause the beholders to be sorry, considering the Mounts, Rampiers & Flankers sometime so well replenished with great Ordinance and now looke like a

new shorne sheepe, these pieces put a way few knowes whither. This Castle had faire Houses therein, the Walls & Gates made beautifull with pictures of Stone, the worke curious & delicate. It had a large Gallery covered over with Lead. But the worke being unfinished by the Death of the Right Honorable Georg Earle of Dunbarr (of whom I shall speake hereafter) cause the Pictures in a manner to weepe and feare their downe fall.

There was also to this Towne belonging two goodlie Store houses full of all sorts of Munition appertaining to a Towne made for the Service of God Mars & the Goddesses Bellona. It was for many yeares Governed (by) the right Honorable Henry Carie Lord Hunsden, one of the privie Councill to Queene Elizabeth of blessed memorie. Afterward it was governed by the valorus Lord Perigrine Bartie Lord Willowby. These were Lord Wardens of the Marches betwixt the two Kingdomes and Liveing were good Benifactors to this place. Upon them & in their time attended certaine Gentlemen Pentioners, guarding these Lords in bright Armour with Halberts & Pattezens. And in the last flourishing dayes of (the) Towne and at the death of the ever memorable Princesse Queene Elizabeth it was Governed by the Right Worshipful Sir John Carie Knight, who after the death of his Honorable Father was created Lord Hunsden & his succeeding Heire was Henry Carie Lord Hunsden & Earle of Dover.

I must not omitt the faire built Pallace some time a Court fitter for a Prince then a Subject, but since Berwick's desolation (or rather distruction) it is almost laid levell with the ground, the goodly houses gone to decay, obsolete & worne out. There were Bake-houses, Brew-houses, Slaughter-houses, Stables for horses & Oxen, goodlie Corne lofts. To all these belonged Clerkes & Officers who supplied the Garrison with Bread, Beere, Beife, Butter, Cheese and all kind of victualls for Man & Horses. Every Clerke & officer had his Chamber & Office house, all now lying low and ruined.

This Towne is now under the Governement of a Major, a Recorder, Eight Aldermen, Justises of the Peace, an Alderman for the yeare who is cheife at Guilds, four Bayliffes, a Chamberline, a Coroner, a Towne Clerke, 20 private Burgesses & a bout

200 Comon Burgesses, four Sergeants at Mace. All these are at the Election of the Major. There be other officers belonging to this Towne as Church-wardens, sides men & Constables, besides two Beadles knowne by their Coats.

The Major with the rest of his Brethren & Burgesses and accompanied with his friends are accustomed to ride the Bounders a day or two after his Election to see whither our Neighbours the Scotts have encroached. Also the Major & his Bretheren Justices at high Festivalls are attired in Scarlett Gownes & graced to the Church with the Company of all the Burgesses resident & attended with four Mucitians playeing bareheaded, four Sergeant(s) at Mace also uncovered, very decent to behold.

There were certaine Pentioners in this Towne who were tyed to noe other service then to pray for the preservation of his Royall Majestie & his Progenie.

I will not oblivate the Right Honorable & Late Lord Governour of Berwicke, Georg Earle of Dunbar, Knight of the Noble order of the Garter, Privy Councillour to both Kingdomes, his true affection to this Towne, who was so intirely devoted to the wellfaire thereof that he obtained of King James of Blessed Memory, after the desolucion, that there might bee raised one hundred Soldiers who did attend upon his person here or else where when he pleased.

These had a Centurion or Captain with Lieutenant. And besides these there was a Company of Horsemen who had a Constable or Captain, and these accompanied him well weaponed & Armed wheresoever he went about the King's Affaires in the Borders of these Kingdomes, the said Earle being often Employed to suppress & extirpate Malefactors. He spared no paines to apprehend bad Livers.

There was much good ground belonged to this Towne, but of late it's dispose & distributed into severall hands. Thus much of the Discription of Berwicke.

God save the King.

THE MACRO-LEPIDOPTERA OF BERWICKSHIRE—Part VIII.

By A. G. LONG, M.Sc., F.R.E.S.

Family CARADRINIDAE (cont.)

224. *Anchoscelis litura* Linn. Brown-spot Pinion. 464.
- 1873 Eyemouth (W. Shaw, *H.B.N.C.* Vol. VII, p. 123).
 1902 Lauderdale, very common at sugar (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1927 Common (G. Bolam, *H.B.N.C.*, Vol XXVI, p. 181).
 1952 Dowlaw, many at sugar, August 30 (E. C. Pelham-Clinton).
 Gavinton, common, August 24-September 28.
 1953 Gavinton, September 5-October 6.
 1954 Gavinton, September 11-October 10.
 1955 Gavinton, Elba, Retreat, Nesbit, August 28-September 23.
 1956 Gordon Moss, Old Cambus Quarry, Hirsell, Gavinton, Nesbit Hill, Burnmouth, Grantshouse, September 1-October 20 (A.G.L. and E.C.P.-C.).
 1959 Gavinton one emerged from pupa, August 16 ; at m.v. trap August 19-October 3.
 1960 Pettico Wick, August 27 (E.C.P.-C.).
 1961 Gavinton, September 4.

Summary.—One of the commonest autumnal species. It starts to emerge in the second half of August and may continue on the wing into October.

225. *Tiliacea citrago* Linn. Orange Sallow. 465.

- 1927 Rare. Bolam had no Berwickshire record (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 183).
 1952 Langton North Lodge, one at sugar on a lime tree, September 16.

- 1954 Nesbit Hill, three at sugar, September 14 and 15.
 1955 Gavinton, one in m.v. trap, September 18.
 1959 Paxton, one August 20 (S. McNeill).
 1960 Paxton Lodges, one August 25 (S. McNeill).

Summary—Not common but probably well distributed where there are lime trees. It visits sugar and light about mid-August.

226. *Citria lutea* Stroem. Pink-barred Sallow. 467.

- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
 1874 Ale banks, bred from larvae (W. Shaw, *ibid.*, p. 236).
 1875 Bunkle Wood, Preston, Primrose Hill (J. Anderson, *ibid.* p. 481).
 1875 Whitadder banks (A. Anderson, *ibid.*, p. 482).
 1902 Lauderdale ; not rare (A. Kelly, *Lauder and Lauderdale*, p. 308).
 1927 Common though seldom numerous (G. Bolam, *H.B.N.C.* Vol. XXVI, p. 184).
 1952 Gavinton, three at sugar and light, August 30-September 23.
 1953 Kyles Hill, one on sallow, August 21.
 1954 Polwarth, Gavinton, Kyles Hill, at sugar and Ragwort, September 5-22.
 1955 Kyles Hill, Gordon Moss, Oxendean Pond, common, August 19-September 27.
 1956 Gordon Moss, eighty-five at light, September 22 (E. C. Pelham-Clinton).
 Hirsel, Kyles Hill, Gavinton, Duns, August 23-September 20.
 1958 Duns, September 13.
 1959 Kyles Hill, Gavinton, August 27-September 9 ; Birgham House, September 25 (Grace A. Elliot).
 1960 Gavinton, September 9.

Summary.—A widespread and common species where sallows are established. It flies from about the last week in August until about the end of September, and visits Ragwort, sugar and light sometimes in considerable numbers,

227. *Cirrhia icteritia* Hufn. Common Sallow. 468.

- 1876 Eyemouth, at Ragwort; much paler than English specimens (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
 1876 Ayton Woods; a good series at Ragwort (S. Buglass, *ibid.*, p. 128).
 1879 Burnmouth sea banks (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).
 1902 Lauderdale. Common Addinstone (A. Kelly, *Lauder and Lauderdale*, p. 308).
 1927 Well distributed, sometimes common. Records from Fans, Gordon Moss, Lauder (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 183).
 1952 Gordon Moss, at sugar and ragwort, many (about 25% *ab. flavescens*), August 10 (E. C. Pelham-Clinton).
 1953 Kyles Hill, two at rest on birch and ferns, August 25; Lees Cleugh, one beaten out of elm, August 28; Gavinton, one at light, September 16.
 1954 Polwarth, at sugar and ragwort, September 1.
 1955 Gordon Moss, abundant, some very pale lemon yellow forms, August 2, 9 and 26; Nesbit, one at sugar, September 7.
 1956 Aiky Wood near Whitegate, Gordon Moss, Hirsell, Kyles Hill, Old Cambus Quarry, Gavinton, August 9-September 22 (A.G.L. and E. C. P.-C.).
 1959 Birgham House, August 17 (Grace A. Elliot).

Summary.—A fairly common species where Sallows occur. It starts to emerge in August and continues on the wing well into September. The pale lemon form *ab. flavescens* is frequent at Gordon. It comes to light, sugar and ragwort.

228. *Cirrhia gilvago* Esp. Dusky-Lemon Sallow. 469.

- 1927 Bolam had no Berwickshire record (G. Bolam, *H.B.N.C.* Vol. XXVI, p. 184).
 1953 Edrom, one taken at light by Lieut.-Col. W. M. Logan Home.
 1954 Gavinton, Nesbit Hill, Kyles Hill, eight at sugar and three at light, September 17-October 5.

- 1955 Gavinton, one in m.v. trap, September 23.
 1956 Gordon Moss, four at light, September 22 (E. C. Pelham-Clinton). Hirsell Loch, twenty-six, September 7 and 20; Burnmouth, one, September 21; Gavinton, several, September 15-October 7.
 1959 Birgham House, September 2 (Grace A. Elliot); Gavinton, September 6.
 1961 Gavinton, September 4-23.

Summary.—Widespread and fairly common. It begins to emerge in the first week of September and continues until the first week of October coming well to light and sugar. This is a species associated with the Wych Elm the larvae feeding on the fruits. There is evidence that this species has increased and extended its range although P. J. Selby recorded it for Twizell in Northumberland as long ago as 1837 (*H.B.N.C.*, Vol. I, p. 160 and Vol. XXVI, p. 184). Baron de Worms recorded it for East Linton in East Lothian on September 15, 1960 (*Ent. Record*, 72, p. 248).

229. *Conistra vaccinii* Linn. Common Chestnut. 474.

- 1902 Lauderdale. Common at sugar and ivy (A. Kelly, *Lauder and Lauderdale*, p. 307).
 1914 St. Abbs Lighthouse, one in spring (W. Evans, *Scot. Nat.*, 1914, p. 280).
 1927 Generally common, often abundant throughout the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 184).
 1952 Gavinton, at street lamp, March 1; Duns Castle, at sugar, September 23.
 1953 Langton Ford sallows, March 3.
 1954 Polwarth and Kyles Hill at sugar, April 16; Oxendean Pond at sallows, April 18; Less Cleugh at Tilley lamp, April 27; Retreat, several at sugar, October 8.
 1955 Gordon Moss, at sugar, September 23.
 1956 Gordon Moss, Hirsell, Oxendean, Kyles Hill, March 25-May 17 (A.G.L. and E. C. Pelham-Clinton); Grants-house, abundant, October 20.

1957 Gavinton, at light, March 1-16.

Summary.—A common and widespread species especially where there are oaks and sallows. It emerges in late September, hibernates and reappears in March at sugar, light and sallows.

*230. *Conistra ligula* Esp. Dark Chestnut. 475.

1879 Ayton, plentiful ; has been confounded with *C. vaccinii* (S. Buglass, *H.B.N.C.*, Vol. IX, p. 368).

1927 Less abundant than *vaccinii* but sometimes common locally. Recorded for Eyemouth and Lauderdale (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 185).

Summary.—We have no recent records of this species in the county. Robson thought that the Tyne was the northern limit of its range. Meyrick limited it to England and Baron de Worms says that "it occurs all over England up to the northern counties" (*London Naturalist*, 1956, p. 56). South likewise had no Scottish records. It is a late autumn species and does not usually re-appear in spring.

231. *Eupsilia transversa* Hufn. Satellite. 477.

1902 Lauderdale. Common at sugar (A. Kelly, *Lauder and Lauderdale*, p. 308).

1927 Common throughout the district (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 185).

1949 Preston, several at sugar in October.

1952 Langton and Polwarth, at sallows in April.

1953 Langton Glen at sallows, March 9.

1954 Kyles Hill, Polwarth, at sallows, April 16 ; Elba, at sugar, October 8.

1955 Retreat, at light, April 5.

1956 Bent's Corner, March 25.

1957 Gavinton, March 1.

1959 Gavinton, March 22 and October 10.

Summary.—A common species emerging in October and reappearing in March after hibernation.

232. *Lithomoia solidaginis* Hubn.

Golden Rod Brindle. 483.

- 1954 Kyles Hill, one at Tilley lamp, August 26 and two at sugar, September 4 and 5.
 1955 Kyles Hill, thirteen at m.v. light, August 12-19; Gavinton, two at m.v. trap, August 20 and 25.
 1956 Kyles Hill, one at m.v. light, August 24 and three on September 8.
 1959 Kyles Hill, one on a Scots Pine trunk about two feet above ground level, August 27.

Summary.—A local species but possibly more widespread on our moors than we realise. The larvae feed on Blaeberry, heather and sallow and the imago is out from about mid-August to mid-September visiting light, treacle and heather bloom.

233. *Xylena exsoleta* Linn. Sword Grass. 485.

- 1902 Cleekhimin garden. Feeds on scabious (A. Kelly, *Lauder and Lauderdale*, p. 309).
 1914 St. Abb's Lighthouse, one March 24 (W. Evans, *Scot. Nat.*, 1914, p. 283).
 1927 Well distributed and common in most places (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 186).
 1949 Preston, at sugar, October 11.
 1952 Duns Castle and Oxendean Pond, at sallows, April 9-15; Gavinton, at sugar, October 17.
 1953 Langton Mill ford, at sallows, March 12; Gavinton, street lamp, one, October 22.
 1954 Hardens Road, two at sugar, October 7; Nesbit Hill, two, October 8; Langton Ford, one October 29.
 1955 Retreat, Nesbit, Gavinton, five at sugar and light, September 3-17.
 1956 Bent's Corner, two at light, March 25.
 1961 Gavinton, one, September 23.

Summary.—Fairly common and widely distributed. The moths emerge in September and continue on the wing through October coming to light and treacle. After hibernation they come to sallow bloom in March and April.

234. *Xylena vetusta* Hubn. Red Sword Grass. 486.

- 1875 Ayton, one at sugar (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
- 1876 Eyemouth, one at sugar, seabanks (W. Shaw, *H.B.N.C.*, Vol. VIII, p. 124).
- 1902 Lauderdale. Not so common as *exsoleta* (A. Kelly, *Lauder and Lauderdale*, p. 309).
- 1927 Distributed over the district, seldom taken more than singly or at most two or three at a time. Evans recorded it from several lighthouses. Records from Foulden, Cockburnspath, Whitsome (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 186).
- 1950 Eyemouth, one at light, October 7 (W. B. R. Laidlaw, *H.B.N.C.*, Vol. XXXII).
Edrom House, wings found off a specimen presumably eaten by a bat (W. M. Logan-Home).
- 1956 Gordon Moss, one at light, April 7 (E. C. Pelham-Clinton).
- 1957 Ayton, one taken at a house light, October 16.

Summary.—Rare, but widely distributed apparently most frequently seen near the coast. The imago has been taken at light in October and April.

235. *Cucullia umbratica* Linn. Common Shark. 492.

- 1843 Near Pease Bridge, by James Hardy, recorded as *C. tanacetii* (P. J. Selby, *H.B.N.C.*, Vol. II, p. 110).
- 1873 Eyemouth (W. Shaw, *H.B.N.C.*, Vol. VII, p. 123).
- 1874 Broomhouse—common at honeysuckle (A. Anderson, *ibid.*, p. 232).
- 1902 Lauderdale, at Guelder Rose. Common in gardens (A. Kelly, *Lauder and Lauderdale*, p. 309).
- 1927 Well distributed, common but seldom very numerous (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 187).
- 1952 Gavinton, one at honeysuckle on Red Brae, July 2.
- 1956 Nab Dean Pond, one at m.v. light, July 7; Gavinton, two in m.v. trap, July 10 and 15.
- 1957 Gavinton, July 4.

1960 Gavinton, three at m.v. trap, June 26, 29, and July 1.

1961 Birgham House, July 21 (Grace A. Elliot).

Summary.—Generally distributed but not very numerous. The moths emerge about the last week in June and continue on the wing until the last week in July. It comes to light, honeysuckle, and campion flowers.

236. *Cucullia chamomillae* Schiff.

Chamomile Shark. 493.

1876 Ayton Castle, one taken by W. Cumming (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 128).

1927 Very rare (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 187).

1961 Birgham House, one in m.v. trap, May 1 (Grace A. Elliot).

1963 Burnmouth, two larvae on Scentless Mayweed, July 21 (C. B. Williams and Arthur Smith) another later (E. C. Pelham-Clinton).

Summary.—This species, although rare, may be more widely distributed than the records suggest. The larvae should be searched for in late July or early August on the flower heads of Scentless Mayweed *Tripleurospermum maritimum* wherever this plant grows in fair quantity. The moth flies in April and May.

*237. *Panemeria tenebrata* Scop.

Small Yellow Underwing. 501.

1877 Threeburnford, two (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).

1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).

1902 Lauderdale. On heaths, very rare (A. Kelly, *Lauder and Lauderdale*, p. 309).

1927 Renton sent specimens from Threeburnford to Bolam in the year 1883 (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 192).

Summary.—Robson had no records of this species in Northumberland and thought that it reached the northern limit of

its range in County Durham. He says that it should be looked for about the middle of June but Baron de Worms says that it is "often quite common flying in sunshine in May in grass-land and rough herbage" (*London Naturalist*, 1956, p. 62). The larvae feed on Mouse-ear Chickweed *Cerastium arvense*.

238. *Anarta myrtilli* Linn.

Beautiful Yellow Underwing. 498.

- 1874 Lauderdale, moors, plentiful (A. Kelly, *H.B.N.C.*, Vol. VII, p. 233).
- 1877 Threburnford, common (R. Renton, *H.B.N.C.*, Vol. VIII, p. 321).
- 1880 Gordon Moss (R. Renton, *H.B.N.C.*, Vol. IX, p. 296).
- 1902 Lauderdale. On heaths, common, a day flier (A. Kelly, *Lauder and Lauderdale*, p. 309).
- 1927 Abundant on most moorlands (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 194).
- 1952 Cockburn Law, larva on *Erica cinerea*, August 29.
- 1954 Greenlaw Moor, one imago on *Erica cinerea* flowers, July 11; Bell Wood, one larva, August 7.
- 1955 An imago emerged on June 23; Kyles Hill one larva on *Calluna vulgaris*, August 19.
- 1956 Kyles Hill, three seen at flowers of Blaeberry (*Vaccinium myrtillus*) in daytime but only one caught, May 28.

Summary.—Common on heather moors where it flies swiftly by day visiting flowers of Bell Heather and Blaeberry. It emerges from the end of May and flies through June until about mid-July. The larvae, which are often "stung," feed on Ling and Bell Heather during August.

239 *Pyrrhia umbra* Hufn. Bordered Sallow. 503.

- 1874 Eyemouth, one at sugar (W. Shaw, *H.B.N.C.*, Vol. VII, p. 237). Broomhouse, one (A. Anderson, *ibid.*, p. 232).
- 1877 Sea Banks (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322).
- 1902 Lauderdale. Wherever there is Rest Harrow. Not common. (A. Kelly, *Lauder and Lauderdale*, p. 309).

- 1927 Fairly well distributed, not uncommon, though records from inland are much less numerous than from the coast. Recorded from Cockburnspath (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 191).
- 1933 Cockburnspath, larvae common on Rest Harrow in August (D. A. B. Macnicol).
- 1953 Gavinton, one at street lamp, May 28.
- 1955 Gavinton, one in m.v. trap, July 7.
- 1956 Linkum Bay, two at m.v. light, June 30.

Summary.—Most common at the coast but also inland in small numbers. The moths fly from near the end of May, through June and into July. Larvae occur on Rest Harrow in August and are cannibals. Robson states that the moth occurs in great abundance in certain seasons visiting campion flowers and sugar.

*240. *Heliothis armigera* Hubn.

Scarce Bordered Straw. 509.

- 1875 Ayton, one captured by James Bowhill, jun. (S. Buglass, *H.B.N.C.*, Vol. VII, p. 483).
- 1877 Sea-banks (S. Buglass, *H.B.N.C.*, Vol. VIII, p. 322). Eyemouth, one (W. Shaw *ibid.*, p. 323).
- 1927 Probably only an immigrant; a further specimen was taken at Ayton by Mr. W. J. Bowhill (G. Bolam, *H.B.N.C.*, Vol. XXVI, p. 192).

Summary.—A migrant usually occurring in September and October. According to South several specimens were obtained in 1898 near Berwick-on-Tweed. It comes to light and ragwort flowers and the larva is a pest on tomatoes.

ENTOMOLOGY

Observations during 1964 by GRACE A. ELLIOT, A. G. LONG,
and Lieut.-Col. W. M. LOGAN HOME.

- Cucullia chamomillae*. Chamomile Shark. One emerged on May 11, reared from a Burnmouth larva, another pupa remained as it was. (A.G.L.).
- Calocalpe cervinalis*. Scarce Tissue. One taken at Birgham House, May 17. (G.A.E.).
- Euclidimera mi*. Mother Shipton. Two caught flying by day above Spottiswoode, May 30 (A.G.L.). One taken on Scremerston dunes, June 24 (G.A.E.).
- Agrotis ipsilon*. Dark Sword Grass. One in m.v. trap at Gavinton, June 5 (A.G.L.).
- Trichiuri crataegi*. Pale Eggar. Ten larvae on heather by R. Dye above Bryecleugh and up Byrecleugh Burn, June 21. First imago emerged August 20 (A.G.L.).
- Coenonympha tullia*. Large Heath. Five taken on flat bog S.W. of Twin Law between July 12 and 23 (A.G.L. and E. C. Pelham-Clinton).
- Dyscia fagaria*. Grey Scalloped Bar. One taken below Twin Law, July 12 (A.G.L.).
- Xanthorhoe munitata*. Red Carpet. Two among rushes below Hartside, July 13 ; several (about 30) in large marshy field with Meadowsweet E. of Whiteburn, July 16 (A.G.L.).
- Epione vespertaria*. Dark Bordered Beauty. Two at Newham Bog, July 22 (A.G.L.).
- Epione repandaria*. Common Bordered Beauty. One at Newham Bog, July 22 (G.A.E.).
- Eurois occulta*. Great Brocade. Four in m.v. trap, Gavinton, August 15-17 (A.G.L.).
- Bombicia viminalis*. Minor Shoulder Knot. One in m.v. trap, Birgham House, August 17 (G.A.E.).
- Vanessa atalanta*. Red Admiral. One in Langton Estate, May 24 (D. G. Long) ; three August 21 (A.G.L.). Three at Edrom House, August 21 ; and nine on August 30 (W.M.L.H.).

Vanessa cardui. Painted Lady. One at Edrom House on August 11, two at Silverwells, August 16 (W.M.L.H.); five on thistles near Langton Burn at Gavinton, August 21 (A.G.L.); one at Selkirk, August 21 (C. B. Williams); one at Birgham House about end of August and another on September 12 (G.A.E.)'

Chloroclysta siterata. Red-green Carpet. One reared from a larva found on Ash at Birgham Wood in July, the imago emerged on August 30 (G.A.E.).

ORNITHOLOGY

Observations during 1964 by Lieut.-Col. W. M. LOGAN HOME,
Miss E. BROADBENT, Mr. W. RYLE ELLIOT, D. G. LONG
and A. G. LONG.

Blackcap. A female appeared at Edrom House and took fat from the bird table on April 7-10 and again on May 26 (W.M.L.H.).

Tree Sparrows. A clutch of unhatched eggs in a nest-box were analysed by the R.S.P.B. and found to contain toxic insecticide (W.M.L.H.).

Whooper Swans. A flock of about 40 birds was counted on the Tweed near Norham on November 3 by Miss E. Broadbent. Flocks of about 20 were seen frequently by Mr. W. Ryle Elliot at Birgham. The birds flew up the Tweed on winter mornings and returned in the afternoon sometimes settling in fields near Birgham Haugh.

Crossbill. One flew over Edrom Mains on January 1 (A.G.L.).

Short Eared Owl. One seen on Dunside Hill June 11, one at Hule Moss September 2, another at Oatleycleugh December 27 (D.G.L.).

Dunlin. A pair on Twin Law May 24, about eight on Dunside Hill June 11 (A.G.L.).

Common Gull. Two pairs on the moor south of Twin Law seen by Mr. Arthur Smith on June 25. On June 27 a young gull was found dead on the moor suggesting that the birds had nested. A nest with eggs was reported as having been found by a schoolboy near Rawburn Farm (A.G.L.).

Teal. A female with two ducklings was seen on the R. Dye above Byrecleugh on June 21 (A.G.L.).

Quail. One bird was heard in a grass field N. of Hallyburton Farm on June 24, another at Greenhead on July 18 (A.G.L., D.G.L.).

Hawfinch. One female at Manderston, August 9 (D.G.L.).

Green Sandpiper. One on Langton Burn near Gavinton on August 12 (D.G.L.).

Collared Dove. One seen and others heard at Bilsdean, August 16 (D.G.L.).

Spotted Redshank. One seen near Duns, August 16 (D.G.L.).

Records for Hule Moss by D. G. Long.

Pintail. Three on March 29.

Green Sandpiper. One, August 14.

Sanderling. One juvenile, August 14.

Shoveler. Three, August 20.

Greenshank. Four, August 20 ; one, August 27 ; one, September 16.

Black Necked Grebe. One, August 23.

Scaup. One female, September 6.

Pink Footed Geese. Nineteen on September 12.

Little Stint. Two, September 26-October 4 (*first record for Berwickshire*).

Peregrine. One, October 10.

Barnacle Goose. One in a flock of about 2,000 Pink Feet, December 20.

Dunlin. Several, August 23-October 4.

Merlin. One, September 2.

BOTANY

Observations during 1964 by D. G. LONG and A. G. LONG.

Thlaspi arvensis. Field Penny Cress. On roads among plantations at Spottiswoode, June 27, also on railway near Hartside, July 13.

Epilobium nerterioides. New Zealand Willow-herb. By R. Dye above Byreclough, common, June 14 ; on roads among plantations, Spottiswoode, June 27 ; gravel paths, Manderston, September 19.

Silaum silaus. Pepper Saxifrage. Bridge below Nenthorn, July 19.

Populus tremula. Aspen. Heron's Scaur above Byreclough, June 14 ; Flass Old Wood, June 27 ; sea braes near Cove Harbour, August 27.

Vaccinium vitis-idaea. Cowberry. Around Crib Law, July 16.

Erinus alpinus. Fairy Foxglove. On walls, Manderston, September 19.

Chrysanthemum segetum. Corn Marigold. Cornfield near Lightfield, Gordon, July 19.

Rubus chamaemorus. Cloudberry (in fruit). Near West Rotten Cleugh and Rotten Cleugh (upper Dye valley), July 15.

Drosera rotundifolia. Sundew. Near Seene's Law, July 15.

METEOROLOGICAL OBSERVATIONS IN BERWICKSHIRE DURING 1964.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Month.	Temperature.		Days with Temperature at or below 32°.		Bright Sunshine.			
	Maximum.	Minimum.			Hrs.	Days with Sun.	Hrs.	Days with Sun.
			Lauder.					Swinton House.
			Cowdenknowes.					
			Swinton House.					
			Manderston.					
			Duns Castle.					
			Marchmont.					
			Whitchester.					
January	50	50	24	24	49.4	19	47.6	15
February	50	50	18	22	48.4	19	60.8	18
March	49	49	25	30	33.4	15	37.0	14
April	64	65	29	30	114.3	25	101.7	24
May	67	71	34	31	197.1	28	135.8	29
June	69	70	34	39	176.9	28	138.7	26
July	73	70	38	40	181.7	26	132.1	29
August	75	74	35	41	131.3	25	104.4	24
September	72	70	33	36	158.8	27	153.5	28
October	58	60	28	32	63.4	22	69.5	21
November	55	57	27	28	57.4	20	72.2	22
December	51	51	17	16	38.9	20	32.0	19
Year	75	74	17	16	1245	274	1058	260

RAINFALL IN BERWICKSHIRE DURING 1964.

Compiled by the Rev. Canon A. E. SWINTON of Swinton, M.A., F.R.Met.S.

Station.	Dura- tion.*	Swinton House.	Hours	
St. Abb's Head.	245'			
Tweed Hill.	50'			
Whitchester.	838'			
Duns Castle.	500'			
Manderston.	353'			
Kimmerghame	300'			
Swinton House	200'			
Lochton.	150'			
Marchmont.	498'			
Cowdenknowes.	300'			
Lauder.	600'			
Height above sea-level - -				
<i>Month</i>				
January - -				
February - -				
March - -				
April - -				
May - -				
June - -				
July - -				
August - -				
September - -				
October - -				
November - -				
December - -				
Year - -				

* Number of hours for which rain fell at a rate of .004 inches or more.

TREASURER'S FINANCIAL STATEMENT FOR YEAR ENDING 20th SEPTEMBER, 1964.

<i>INCOME</i>			<i>EXPENDITURE</i>		
<i>Credit Balance at September 20th, 1963</i>	...	£66 19 7	<i>History for 1963</i>	...	£266 15 0
<i>Subscriptions</i>			<i>Printing and Stationery</i>		
Annual and Junior ...	...	£379 15 0	Printing Notices, etc. (Martins)	...	£53 16 0
Entrance Fees ...	...	20 0 0	Stationery ...	...	17 0 2
Sale Badges ...	...	9 0 0			70 16 10
Arrears ...	...	20 0 0	<i>Sundry Expenses</i>		
			King's Arms—Hire of Rooms ...	...	£2 2 0
<i>Sundries and Visitors Fees</i>		428 15 0	Tweeddale Press re meeting ...	...	3 0 0
Library Sale of Histories	...	£7 1 7	Bulk Postage—Subscription Notices	...	3 3 4
Visitors Fees ...	...	2 0 0	Presentation to T. Purves, Esq. ...	...	5 5 4
			Insurance Premium ...	...	2 9 6
			Bank Charges ...	...	10 6
		9 1 7	<i>Subscriptions</i>		16 10 8
			Assoc. Preservation Rural Scotland	...	£1 1 0
			Chillingham Wild Cattle Assoc. ...	...	1 1 0
			British Association ...	...	3 3 0
			<i>Expenses</i>		5 5 0
			Secretary W.R.E. ...	...	£28 0 0
			Rev. J. C. Finnie, Ed. Sec. ...	...	1 10 0
			Treasurer ...	...	3 2 0
			Delegate to British Assoc. ...	...	17 0 0
			Credit Balance at Bank, September 20th, 1964	...	49 12 0
					95 16 8
		<u>£504 16 2</u>			<u>£504 16 2</u>

BALANCE SHEET.

<i>LIABILITIES</i>		<i>ASSETS</i>	
Carried from General Account	... ..	Cash in Bank—National Commercial Bank	£95 16 8
Investment Account	...	Trustee Savings Bank	... ..
Balance at 20th September, 1963	£205 17 5	Trustee Savings Bank Special Inv. Dept.	... ..
Transferred to Special Inv. Dept.	160 0 0		160 0 0
	<u>£45 17 5</u>		
Interest Added	... ..		50 19 11
			<u>160 0 0</u>
Special Investment Dept.	... ..		<u>£306 16 7</u>

FLODDEN FIELD MEMORIAL FUND.

Balance at September 20th, 1963	£52 5 10		
Interest added	1 0 9		
	<u>£53 6 7</u>		
		Cash in Bank	£53 6 7

Audited and found correct

P. G. GEGGIE,
Hon. Auditor.

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